THE

MADRAS JOURNAL

OF

LITERATURE AND SCIENCE.

VOL. XIV.

Part I.

THE

MADRAS JOURNAL

OF

LITERATURE AND SCIENCE.

PUBLISHED UNDER THE AUSPICES

OF THE

MADRAS LITERARY SOCIETY

AND

AUXILIARY OF THE ROYAL ASIATIC SOCIETY.

EDITED BY THE

COMMITTEE OF THE SOCIETY.

VOL. XIV.

1847.

MADRAS:

PRINTED BY REUBEN TWIGG, AT THE CHRISTIAN KNOWLEDGE SOCIETY'S PRESS, VEPERY;

AND PUBLISHED BY J. K. BANTLEMAN, AT THE COLLEGE.

MDCCCXLVII.

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MADRAS JOURNAL

OF

LITERATURE AND SCIENCE.

No. 32. *January—June,* 1847.

I.—*Translation of the Kongu-desa-rajakal. By the Rev.* WILLIAM TAYLOR.

INTRODUCTION.

AT an early period of my analysis of the Mackenzie Manuscripts, I had occasion to introduce a Notice* of the work entitled *Congu-dēsa-rājākal,* and to give a brief indication of its general characteristics. It does not seem to me that, in writing that notice, I had retained any special recollection of having before adverted to it; as in Orient. Hist. M. S. translated, vol. 2, p. 63; which may be accounted for, by my always disliking to look again at that work: an aversion the impropriety of which I have only recently seen. A sentence or two from the page adverted to, may be here introduced: " This Manuscript appears peculiarly valuable from being the only one, as is conceived, bearing on this section of the south country." " The plan of printing Manuscripts *verbatim* with literal translations, as the foundation of general inferences from the whole, at a future period, is the only means of providing a safe chart to the general historian, in this long neglected, and

* 1st Report, Journal of Literature and Science, Vol. 7, page 3.

supposed to be, barren field."—" Mr. (Professor) Wilson says (Des. Cat. vol. 1, p. 198,) 'According to this work the series of *Konga*, or *Chera*, princes amounted to twenty-six, from *Vira-raya-chacraverti* to *Raja-malla-deva*; in the time of whose descendants the kingdom was subdued by the *Chola-raja*.' What descendants, or how many of them intervened between *Raja-malla-deva*, and the *Chola* conquest, seems needful to be ascertained, before attempting the ascending series up to *Vira-raya*."

Before the publication of that volume (in 1835) the mistake, which appeared in a few of the earlier printed sheets of supposing the Mackenzie Manuscripts to be at Calcutta, was removed; and access to those Manuscripts, then deposited at the College, was given to me. One consequence was my translating the Manuscript in question, during a period of some leisure in 1836; and when (towards the close of 1837) the analysis of the collection was begun, I did my best from the two imperfect copies to make one complete, by collation; but failed of success; and subsequent care to recover, if possible, the lost leaves, from amongst other fragments in the collection, also failed. The notice above adverted to, was penned from a general recollection of the translation, but recently made. I had no intention to be particular; and no time to be critically nice. A great work was to be done; and a very limited time, within which it must be done, had been assigned. Besides in a mere abstract, anything like nicety was excluded. My own notion of exactitude is, a printing of the document on the one page, with a closely literal version on the other page, as above indicated; and as at various times, was largely dwelt on: particularly in Madras Journal of Literature and Science, vol. 6, page 156.

In consequence of my removal, in 1839, to the Mission Premises at Vepery, and again in 1842, and back to my customary residence in 1840 and 1842, occasioned by the unhealthiness of the Mission Premises, my books and papers became subject to considerable disorder: the lighter pamphlets, and papers in particular. Hence my rough version of the *Cōngu-*

dēsa-rājākal narrowly escaped destruction by *termites*. When recovered I could not, from want of leisure, pay any attention to it. A few hints and suggestions occasionally received from Walter Elliot, Esq. sufficed to keep the document in recollection; and, very recently, a period of some leisure having recurred, I took up the rough translation in earnest: after completing an ethnological Essay on Eastern Relations previously forwarded. Various occurrences have unavoidably diverted my attention, notwithstanding, comparative leisure enjoyed. At length I am able to issue the document from my hands; after bestowing on it as much care and attention as I could command.

The translation is close and literal; the original on a parallel page is wanting to make the whole complete; according to the idea of several good* judges, as well as my own idea. That deficiency cannot now be helped: it may be remedied at a future day. I have not intentionally misled the reader; as I regret to find too many, so called, translations frequently do. It is still very desirable to collate three or more copies, if they can be found, and to fill up chasms; for much has been made to depend on that defective passage, which is near the close of the *Chola* dynasty.

Throughout the document, the word used is *Congu-dēsa*. I do not once find *Chera-desa*. The *Kērala* and the *Concana-dēsas*, as distinct, do occur. In inquiring verbally about the *Congu-nād*, as more usually phrased in Tamil, I have been told it was the neighbourhood of the *Coimbatore* province. Dr. Rottler, in that portion of his Dictionary which was revised by himself, terms the *Congu-nad* "the Malabar country;" by which, I presume, he meant "the Malabar Coast" or Malayalam Country. He could not mean the region of "the Malabars," or Tamil language; because that is contrary to other portions of the Dictionary; and to fact. But he states *Congen* to be an epithet of the *Chera* king; or, of an inhabitant of that country. The *Nigandu* extends the title to the *rāja* of *Codugu*, or Coorg. These remarks are made, because there are

* Madras Journal of Literature and Science, Vol. 6, page 165.

some discrepancies in the Manuscript; because the bounds of the *Congu* and *Carnātaca-dēsas* are made to run into each other; and because sometimes the term *Carnātaca-Congu-desa* occurs: implying *Congu* to be a conquered and subordinate portion of *Carnata,* as it probably was during the *Oyisāla* dynasty of *Vellālas.*

With these few and brief indices, the translation of the Manuscript—in a somewhat homely, and not idiomatic, style—is commended to the attention of the reader: not for the elegance of the manner; but for the possible importance of the matter, which it will be found to contain.

MADRAS,
Pursewaukum,
April, 1846.

W. T.

CŌNGU-DĒSA-RĀJAKAL.

The Dynasty of Sri-Vira-raya Chacraverti, and of Gōvinda-raya.

1. Vir a-raya. In the history of Kings in the *Cali-yuga* the first name inscribed is that of *Vira-raya* Chacraverti of the *Retti** tribe, who ruled in the town of *Scanda*† in the *Congu* country. He was installed in the throne of the *Congu-dēsam* and, being anointed wore the crown; and, enjoying all manner of prosperity, he ruled with equity and justice, and so protected the country.

2. Govinda-raya. *Gōvinda-rāya* of the solar line, being crowned ruled in *Scanda-pura,* in *Congu-desam,* with a splendour exceeding that of his father *Vira-rāya Chacraverti:* and, being of illustrious fame, there was no king equal to him.

3. Crishna-raya. *Crishna-rāya* being crowned in *Scanda-pura* of *Cōngu-desa;* and searching the *Nīti Sastra* more, he reigned with greater equity and justice than his father *Govin-*

* The Retti, or Reddy caste, is a tribe of cultivators of the soil. The Vencata-giri chiefs came from that tribe. It is usually considered a northern tribe. In Canarese and in Telugu the term corresponds with Vallala in the Tamil language.

† The exact locality of Scanda-puram is of consequence. It cannot be determined by the M. S. alone.

da-raya, and acquired great fame; being without equal among kings.

4. Calavalla-raya.

Calavalla-raya being crowned, reigned in *Scanda-pura* of *Congu-dēsa:* he exceeded his father *Crishna-raya* in equity and justice; and, enjoying all prosperity, was much celebrated.

5. Govinda-raya.

Govinda-raya being crowned in *Scanda-pura* of *Congu-dēsa* was more celebrated than his father *Calavalla-raya.* Going to war with hostile kings he overcame them; received tribute from a great many of them; and, performing many acts of charitable munificence, he governed the kingdom. Then (according to inscription) in the year of *Salivāhana Saca* 4,* in the 17th or *Subana* year of the *Prabhavādicāptam* (cycle of 60 years) in the full moon of *Vaiyasa* month (May), this *Govinda-raya* made a grant of land and gave a *Sāssanam* (record) to the *Jaina* named *Arichanna.*

Salivahana Saca 4.

A. D. 82 + or 40 + 79=119.

That land belonging to the *Culasta* district in the town called *Bōmacoma*, extended to seven *Candacas* (a measure). The charitable grant was made to the Temple called *Congani-varmam-basta Jainya-Devatārchani.* The name of the *pusāri* officiating in that temple, and the *Guru* (spiritual preceptor) of *Arichanna* was *Pranyābācharya.* He resided at the foot of *Sri-carē-vricsha* (*the sacred tree*, or shrub, planted near *Jaina* temples). In those days the names of (distinguished) *Jainas* were *Pancha-nandi*, *Checupa*, and *Jaya-deva.*

6. Chatur-bhuja-Cannara.

Sri-Chatur-bhuja-Cannara-deva Chacraverti, of the *Retti* tribe, and solar line, who had four hands, being crowned in *Scanda-pura* of *Congu-dēsa*, whenever it became needful to go to war, he went out joyfully with eighteen (kinds of) drums, and was a conqueror. He knew how to play on the *vina* (or lute) and also the *Barata Sastra* or the art of dancing. He understood the enchantments *(mantra)* of the *Cotandam*, or bow, and of the *Nāga-archina mantra.* He acquired all kinds of banners, taken from conquered kings; and ruled the kingdom with great equity.

Thus there were three persons acquainted with the sacred books of those *Jainas.* Their *Guru* was named *Naga-nandi*, who was

* The year four (4) does not to me appear satisfactory. It has the semblance of a number thrown in conjecturally: and one character on the right side might raise it to 40 or 400.

thoroughly versed in their religious wisdom (வேதஞானம்) *vedanjānam.* He was one who well explained the spiritual treatises of that religious system to those kings who belonged to it. He lived to a very advanced age.

The son (of the before mentioned king) *Tiru-Vicrama-deva Chacraverti*, being anointed and crowned, in *Scanda-pura*, ruled the kingdom. Then *Sancara-devar* (*Siva*) visibly appeared to him; and, in consequence, he quitted the *Jaina* religion, and was turned to that of *Siva;* and on setting out to the conquest of the *Dacshin** country, he made presents of lands and other things; and overcame the *Chola*, *Pandya*, *Kerala*, and *Malayāla* countries, and returned. Then the grant of land, by inscription,
Salivahana Saca 100, A. D. 177—8. was S. S. 100† in the *Sidhartha*, or 53d year of the cycle in *Vaiyasi* month, in the bright half of the moon's increase, on Monday, at the time when the moon's eclipse‡ was half finished,
7. Vicrama-deva. *Tiru-Vicrama-deva Chacraverti* gave to the *guru* named *Narasinga-patta*, of the *Bharadivaja* tribe, a charitable inscription (donation) of (*Panche-sata*) five hundred *Candacams* of land. That land is situated in *Congu-desa* near which that *Sancara-deva* temple is situated, in *Scanda-puram* (at a distance from the temple.) This king also ruled over the *Carnataca-desa*.

8. Congani-verma. § *Srimat-Congani-verma-dherma Mahathi-raya* of the *Cānāvayana* tribe, of the *Ganga* race, be-

* The statement that Vicrama-deva after quitting the Jaina religion, and following that of Siva set out to the conquest of the Dacshin (South) country, and overcame the Chola Pandya, Kerala and Malayala countries, requires grave attention as to whether this language accord with the lower portion of the modern Mysore country. The point will come into further discussion.

† The date S. S. 100 or A. D. 177—8 has some appearance of being artificial. By a rough process of my own, grounded a retrocession of the moon's nodes, reckoning backwards, I found that an eclipse did occur about that time: and running the calculation forwards, from the eclipse which took place at the death of Julius Cæsar, the like result occurred. But I wish an astronomer would check the date. Supposing it ever so accurate, the date of an eclipse might have been taken from astronomical tables, and inserted, as that of an inscription. My objection to an inscription of so early a date is a practical one. No legible inscription has been found, in the South Peninsula, higher up than about S. S. 1000. Inscriptions in the Pandya, and Chola, desas, presumed to be of older date, are worn and defaced, by time, with only a few legible letters.

‡ Esteemed of peculiar merit just then, even to the present time.

§ To the best of my knowledge and recollection, the title Srimat or Srimati, is not of Southern usage. In Mahratta, and Canarese, inscriptions, it is of almost uniform occurrence. In the Tamil language inscriptions are I think uniformly commenced with Svasta Sri.

ing crowned in *Vijaya-Scanda-pura*, ruled the kingdom. This king, in going out to conquer hostile kings, was accustomed to cut a stone asunder with his sword; and then to vow that this was a pattern of what he would do to the kings his enemies. Accordingly he went forth, and killed those kings, who opposed him; taking tribute only from those who submitted before him; and thus caused his reign to be marked by great princely wealth. The manner of his munificent charity was such, that this king shone like the sun in the firmament above, in dispersing the darknesses of all the sins of his own *Ganga** tribe of people. As he was exceedingly wealthy he first acquired the *pre-nomen* of *Srimathi*, and afterwards as he ruled the kingdom, making many charitable donations, he acquired the surname of *Dherma-mahathi-raya*. As wealth, the *Congu* country, and great munificence, were possessed by him, he was hence styled *Srimat-Congani-varma-dherma Mahathi-raya*. Having acquired great fame he protected the kingdom. His reign was in S. S. 111, in *Pramōdūta* year.

9. Madhava. The son of that king *Srimān-mādhava-mahāthi-rāya* being crowned king of *Congu-desa* in *Vijaya Scanda-puram*, governed the kingdom like his father; and understanding many arts, and law books, enjoying kingly prosperity, he gave presents of money and vestments to learned men, to poets, to poor people, and those very poor: he was like the *Carpaca*-tree of plenty, which gives whatever is sought from it. So he gave to all who asked, and obtaining high reputation in the world, he governed the kingdom. Hence he acquired the fame of *Sriman Mādhava Mahathi-raya*.

10. Hari-Verma, S. S. 210. His son *Srimat-Hari-Verma-mahathi-raya* being crowned king of *Congu-desa* in *Scanda-puram*, being in a great town of the *Carnataca-desa* called *Dalavan-pura* he protected (or governed) the country of *Carnataca*.† By the four devices of peace, division, tribute, war, (*Sāma, betha, dhana, tandam*) he derived tribute from many kings, and being

* The Vallalas, or agricultural tribe, call themselves Ganga-cula, in distinction perhaps from the Agni cula, fire-tribe, or Cholians.

† In the reign of Hari-verma we find a change of capital from Scanda-pur: to Dalavan-pur: Verma is not a Southern title. It was used by the Kadamba dynasty at Banavasi north, near the site of Gootul in modern maps. In this reign the first mention is made of Talicad; Takadur being a dependency. Telikota is due north of Gootul; and to the northward of east from Belgaum. The M. S. does not spell the word Talcad but Talicadu.

more warlike than any of the kings between the four seas, he became more wealthy than even *Hari,* who dwells with *Lacshini* (goddess of wealth or plenty) and therefore acquired the name of *Srimat Hari-varma Mahathi-raya.* He gave grants of lands, and other things to many persons. The detail of his grants of land is the following :

Saca year 210 in *Subakirathi* year in *Panguni* month, in the bright half-moon's age on the day of the full, on Thursday (*Vrihaspati-vāram*) he gave the village of *Takadūr* to the *Sipahis* (soldiers) who before dwelt in the pettah of *Talicad*, three portions ; and one portion to a Brahman who performed religious ceremonies in the temple of *Mūlasthanēsvara* in the said village.

11. Vishnu Kopa (or Gopa.)

His son was *Vishnu-kopa-mahathi-raya.* Being crowned in *Dalavan-pura*, the metropolis of *Tălicad*, he conquered to the south at the head of the four kinds of troops, and acquired the fame of a great warrior. He performed many munificent acts ; such as, gifts in general, donations for temple service, and gifts to spiritual preceptors, and many others. He built a *Vaishnava* temple in his kingdom ; and being a great devotee* of *Vishnu*, he acquired the name of *Vishnu-kopa-mahathi-raya*, and with it great fame. Both the *Congu-desa*, and the *Carnataca-desa*, were subject to him. As this *Vishnu-kopa-mahathi-raya* at first, for some time, had no child,

12. Madhava.

he adopted a son from the same race, named *Mādhava-mahathi-raya :* he was anointed in *Dalavan-puram*, and in subordination to his foster father's directions he, for a time, governed the kingdom. Subsequently *Vishnu-kopa-mahathi-raya* had a son born to him, named *Crishna-verma-ma-*

13. Crishna-verma.

hathi-raya ; in consequence of which the said *Crishna-verma-mahathi-raya* was anointed in the capital, and after having given up to the before mentioned *Madhava-mahathi-raya* some provinces situated near to the foot of the mountain passes, he then governed the kingdom. This *Crishna-verma-mahathi-raya* governed the *Congana*† and *Carnataca* countries with great equity ; and being a votary of *Siva* he caused several *linga* images to be set up, and consecrated in *Dalavan-*

* In Vishnu Gopa we meet with another change of religion, he being a Vaishnava. Krishna-verma reverts to the Saiva religion.

† In Krishna-verma and Druhvaniti we find mention of the Congana country : before it is uniformly Congu-desam.

puram; and giving lands in donation to those temples, he was like fire in the forest of this sinful *Cali* age ; (that is removing evil even as fire burns up a forest,) and thus he governed the kingdom with greater equity than his father. As this king had no son, after the said *Crishna-verma-mahathi-raya*, one of the above mentioned race (whence *Madhava* was taken) named *Dindicara-raya*, son of *Pari-kulatti-raya*, held the kingdom in his power. But afterwards the *Mantri*, the *Senāpati*, and other courtiers, taking counsel together, anointed in *Dalavan-puram*, *Srimat Congani Mahathi-raya*, son of the younger sister of the late *Crishna-verma-mahathi-raya;* and he, while ruling, being skilled in many sciences (or arts), and understanding many languages, conquered many countries ; receiving tribute from them, and bestowing greater charitable largesses than any of his predecessors, he governed the kingdom. At that time some portion of country was under the rule of *Hari-chandra-dindicara-rayen.* In it near to *Alur* he (*Congani Mahathi*) gave the village of *Parol-kenur* as a charitable present to the wife of his Sirdar (general). His son was *Druhva-niti-raya*, who being anointed (or crowned) in *Dalavan-puram*, protected (or governed) the *Congana* and *Carnataca* countries ; and having read many *Mantra-Sastras*, and being a great magician in the *Mantras*, whenever he might go to war with his enemies, by the power of his *Mantras* he would make a loud sound. The forces of the enemies remained mute and motionless, with their warlike arms upright in their hands, and without knowing how to make use of them. He appeared to his enemies like *Yama* (the regent of death) in the time of the *pralaya* (or universal destruction by the deluge). He made a vigilant supervision of justice to the inhabitants of fifteen borders. He conquered the *Kerala*, *Pandiya*, *Chola*, *Dravida*, *Andhra*, *Calinga*, and many other countries besides ; taking from them tribute : and as other inimical kings were afraid to come near him, he acquired the name of *Druhva-nithi-raya.* His son was *Mushcara-raya*, who being anointed and crowned in *Dalava-puram*, excelled his father in the *Mantra-Sastra* called *Dhanur-vidya* (science of the bow archery) he took tribute from the countries which his father had conquered; and, continuing to retain them in subjection, he made them fall at his feet. As he interposed to prevent the regular receipt of the charitable donations made by his predecessors to the

14. Dindicara.

15. Congani. S. Saca, 288, A. D. 365—6.

16. Druhva-niti.

17. Mushcara.

Brahmans and others, he acquired the title of *Brahmhari-raya.*

18. Trivicrama.

His son was *Trivicrama-raya*, who being anointed and crowned in *Dalavan-puram*, understood fourteen out of the sixty-four *vidyas* or sciences (known) in the world ; and by the four devices of peace, gift, division, and war, he conquered many countries,; and taking tribute from them, frequently investigating the *rāja-nîthi*, or equity of kings, punishing the guilty, or putting them out of the way, and protecting the good, he governed the kingdom.

19. Bhuvicrama.

His son was *Bhuvicrama-raya*, who being anointed and crowned in *Dalavan-puram* *S. Saca* 461 in *Sïdharthî* year, protecting the *Congu*, and *Carnātaca* countries, he continued the bestowment of the charities of his father ; and being victorious, in many countries, he obtained many elephants ; and thus acquired the title of *Gajapati ;* and, making weapons of the elephants' tusks, he also formed some royal insignia from the same. He continued the exercise of the public charities of his forefathers in the different conquered countries ; and in this manner protected the kingdom.

20. Congani.

His son was *Congani Mahathi-raya*, who ruled peaceably, surrounded by the splendour of the nine kinds of jewels which every where covered his crown and his throne ; and he governed the kingdom with charitable equity. He placed his *elder* brother (supposed to mean his uncle's son, or son of the younger brother of his father) as generalissimo of the forces ; and for some time received tribute ; but as several kings of countries did not give to him (the general) the customary tribute he (the king) set out with the elephants, horses, chariots, and infantry (the four Indian kinds of arms) these four arms, to make war ; and overcame the *Chola*, *Pandiya*, *Drāvida*, *Andhra*, *Calinga*, *Varāda*, *Maharashtaca*, and other countries, even to the banks of the river *Nirmata* (Nerbudda), took tribute, and bringing it home he acquired the surname of *Bhuvicrama-raya.* He with great resulting renown built the fort of *Dalavan-pura ;* and, distributing many charities, he protected the kingdom. That *Valla-vācya-raya*, (the elder brother as supposed) conducting himself by trusting the word of his younger brother, went from country to country collecting the tribute ; and, fighting with many enemies, conquered them.

21. Govinda.

His son *Rāja Govinda-raya* being anointed, and crowned in *Dalavan-pura*, was a holy man of the *Ganga race :* and understanding the good and equitable way, he protected the kingdom ; and was like a jewel on the forehead of all kings (that is above them all, or excelling them all). He was like to *Parasu-rama* in the knowledge of

archery, in prosperity like to *Devēndra;* and he made the garlands on the crowns of all other kings to fall at his feet. Taking with him swords, rockets, and other offensive weapons, he overcame hostile kings: he sent a great many persons to the town of *Vaivasvata Menu* (that is, he killed them). He was a very great votary of the *Lingamārcam* (or *Saiva* sect). Consequently he popularly acquired the name of *Nandi-verma.* He ruled for some time in the town called *Mūganda.* His younger brother named *Siva-rama-raya*, being anointed and crowned in *Dalava-pura* he, with great devotedness, inquired concerning the *Niti-sastra* of the divine Brahmans; and so ruled the kingdom. At that time the manner of making donations of land, that is to say during the time that he lived in *Mūganda-patnam*, was as follows: (according to the mode of making the *Sassanams*) *S. Saca-vasthu-grega-banna-yaddha* 591* in *Brahmōduti* year 4 of the cycle, in *Macara* month, (December) the tenth of the year in the *Uttarāyana* (while the sun is to the north of the equator). He was like the *Ganda* bird among other kings, who were lions (fabled to take them, and carry them away) he was named *Siva-maha-raya.* The gift was made to *Vasadeyan*, his town was called *Nettamur;* he was a son of *Vishnu* (one so called), and was skilled in the *Veda-sastra*, a man of holy disposition. To him *Uliyar-hōbhalli* and *Hēli-halli*, were given by the king, in free gift, without rent or tax. And in this kind of manner he performed many other acts of charity. His grandson (*lit.* his son's son) *Prithivi-Congani-mahathi-raya* being crowned in *Dalavan-pura*, ruled over the *Carnātaca-dēsam; Sri-Purusha-raya* being general of his forces, he gave to him (the general) twelve villages in *Vijaya Scanda-puram*, who, residing in them, made war with hostile kings and conquered them; and thus giving great satisfaction to the king, the king conferred on him the title of *Chauriyā-verma-narēndra-Senādipati*, (*i. e.*) the armed warrior, king of men, and commander of the forces. The manner of giving land to him is the following. *S. Saca-Ashta-yulōshya-shutam* 668 in the *Prahbava* year (the 1st of the cycle,) in *Chittra* month, in the fifth day of the bright half of the moon's age in the *Aswini* mansion, the first (of the

22. Siva-rama.

S. Saca, 591, A. D. 668—9.

23. Prithivi Congani.

S. Saca, 668.

* The date S. S. 591, A. D. 668—9, is introduced, apparently by a specimen of the mode of using words for numbers—vasthu-grega 500, banna 90, yuddha 1. There is some discrepancy in the astronomical date, so that I should suppose that instead of Macara (solar sign) we should read Margasirsha (lunar month) corresponding with Cancer. Astronomical dates are not previously given.

two) on Monday. He in the palace, occupied with *Mangala-carma* (or always doing good or agreeable things) received in consequence the name of *Siva-maha-raya ;* and joyfully ruled the kingdom. His younger brother was *Vijayāditya-raya*, whose son was named

24. Raja-malla. *Rāja-malla-deva-raya*. He being anointed, and crowned in *Dalava-pura*, protected the *Carnataca* and *Congu* countries. He was beautiful in form as *Manmata* (the god of love) in war, he was like *Arjuna*, in kingly splendour like *Maha-mēru ;* he was even as *Sri-purusha* (Vishnu). In addition to the 12 villages near *Vijaya Scanda-pura*, before given to the general, the king also gave to him *Vijaya Scanda-pura* itself. To this gift, the witnesses were, the ministers, and royal princes of his own race: the divine witness was *Mallicārjuna-svami**, (the name of the idol introduced into the grant, as knowing and testifying to the truth of the gift). In this way he made and bestowed the charity. As he was surrounded by much splendour (*alancāram*) and as he was always prosperous in enjoyment (occupied in state and ceremony) in the palace, he acquired the name of *Siva-maha-raya*, and so governed the kingdom.

25. Ganda. His son named *Ganda-deva maha-raya* being anointed and crowned in *Dalavan-puram*, and having received the usual insignia of all kings, he took, and brought tribute, from *Drāvida-dēsam*, and making friendship with the *Chola* and *Pandiya* kings, he governed the kingdom, like *Rama* in goodness ; and thus with many excellent dispositions, and with great courage he went into the *Drāvida-dēsam*, and conquering the *Drāvida* king who ruled in *Canchi-patnam*† (Conjeveram) and making war with the *Chola raja*, impressing him with fear, he afterwards made friendship with him ; and thus, bringing fame to the *Gangakulam* he protected the kingdom.

26. Satya-vacya. His son was *Satya-vācya-rayā*, who being crowned in *Dalavan-pura*, rooted the wicked (or evil persons) out of the kingdom, and protected the good ; and conducting his affairs with perfect equity, he acquired a good name with the title of *Satya-vacya*,

* Under Raja-malla we first meet with the name of Mallicarjuna as that of an idol ; of very frequent after occurrence. That name is not common, or even known, in the South. For some extent of country around about the modern Bellary, it appears to have been the popular deity.

† Ganda is said to have conquered Canchi-patnam ; and if we take the latest date preceding S. S. 668, A. D. 745—6 and add 45 years for the reigns of Prit'hivi, Raja-malla, and Ganda, it will bring us to A. D. 800. Now Canchipuram was nothing worth the mentioning before Adondai ; and that date is somewhat antecedent to the period of Adondai. The date is so much the more credible. Canchi must have been taken from the Curumba ruler.

(the monarch whose *word* is *truth*). His younger
27. Gunaluttuma. brother was *Gunāluttuma-raya;* who, being crowned in *Dalavan-puram,* continued with great equity the distribution of the charitable appointments of his predecessors, in the *Congu* and *Carnataca* countries. He was on friendly terms with other kings, and so governed his kingdom. His younger brother was *Raja-malla-deva-raya,* who being crowned in *Dalavan-puram,* and possessing the insignia of all kings, when he came to make war with the *Pandiya* king, the latter was defeated;
28. Malla-deva. and *Malla-deva,* acquired the fame of being without equal in power among any other kings. His elder brother he placed (as governor) in *Scanda-pura,* and so governed the kingdom. The manner of the charitable benefactions made by his elder brother named *Gunāluttama-raya,* was the following *S.*
S. Saca, 800, A. D. 877—8. *Saca,Sombāvasu* 800,*Vihari* year (33d of the cycle) *Ani* month (June—July) on *Guru-vāram* (Thursday or Friday) on the full moon day, in the *Punarvasu* lunar mansion, (the 7th) he gave in full possession, free of all taxes, the village of *Vira-halli* to the officiating hierophant of the temple of the *Jaina** god named *Vishnu-gohalliyam,* who was named *Sashi-pushana-maha-muni,* the disciple of *Agora Sōma-bhagavanta,* the disciple of *Desa Sōma bhagavanta,* the disciple of *Bara Buddha-bhagavanta,* the disciple of *Congana-Culēsvara-bhagavanta,* the gift was for the purpose of sacrifices to ceremonial anointings, and other charities.

Subsequently in the island between the two branches of the *Cāveri* river, where *Gautama* had once rendered homage to *Pachama Ranghana, Nayaca* (*Vishnu*), but which place now had become overrun with wood, one named *Tirumalaiya* built a temple to *Rangana-nayaca* and surrounded it with a petty wall; calling the name of the place *Sri-rangha-puram;* and to the westward of the same, he erected a small building with a consecrated image of *Vishnu* in it, to which he affixed his own name, calling it *Tirumala-deva;* and he himself thenceforward officiated as hierophant in
S. Saca, 816, A. D. 893—4. both of these temples. This was in *Saca* year (816) eight hundred and sixteen, in *Ananta* year in the 7th day of the bright half of the moon's increase in *Vyasi* month on *Sucra-vāram* (or Friday.)

* With Malla-deva this dynasty of kings appears to have closed, in or about, S. S. 800, A. D. 877—8; and it would seem as though he had gone back to the Jaina credence. The foundation of a Temple only, by one Tirumala, occurs in S. S. 816, A. D. 893—4. Of course from connected circumstances, this is not Sri-rangham the island near Trichinopoly, but Sri-rangham (the island) the site of the modern Seringapatam in Mysore: the town however not having been founded till long afterwards.

II.—*Chola Conquest.*

1. Aditya-varma. In the *Chola-desam*, *Aditya-verma-raya*, son of *Vijayadi-raya*,* being crowned in *Tanjavur-patnam*, he came to *Congu-dēsam*, and conquered the *Vardar* (huntsmen or wild people) of the king of *Congu-desam*, and took the town of *Talicad;* and, giving many free endowments to many *agrahāras*, he governed that country, in addition to his own.

2. Vira-Chola. His son was named *Vira Chola-raya*† and was crowned in the town of Tanjore, as ruling also over the *Congu* and *Carnataca* countries : he conquered in other countries ; and as being without fear in war, he was very powerful ; and as he was a great devotee of *Narayana* he also thence acquired the title of *Vira Chola Narayana-raya.* This king, in alliance with the *Pāndiya* king, conquered many other countries. Afterwards *Vira Chola Narāyana-raya* went to *Singa-dīva*, and engaging in war he conquered the *Simāla-raya* (king of Ceylon). Acquiring great fame in the world and building an *agrahāra* called *Vira-narāyana-puram* (said to be still existing) on the bank of the Cauvery, in the *Chola-desam*, he gave free endowments to the *Brahmans* in it, and also free endowments to other *agrahāras*. He, being one day in (or on) the sea, heard the sound as of the beating of the *māthalam* (a kind of long drum), and considering whence it proceeded he thought it must be *Sabhāpati-svāmi*, of *Chidambaram*, beating the *Damaraca*, a kind of small hand drum, (called in Tamil *uduckai*) and most likely the god dancing with *Parvati:* he in consequence expended great wealth there, and built the *Canaca-sabha.* This king had a great many children. Among these, he gave the

3. Desotya-raya. *Chola-desam* to *Desōtya-raya*, and the *Dravida-desam* to *Harinjaya-raya :* and then obtained *Swergam* (*i. e.* died.) His son was *Desōtya-raya*, who being crowned in *Tanjavūr* he caused his elder brother *Harinjaya-raya* to rule in *Drāvida-dēsa ;* and himself attended to kingly duties, and all connected matters, with equity, in the *Congu* country. On the banks of the Cauvery he built four *agrahāras*, called *Chatur-samudram*, or the four seas, and so governed the kingdom. He had no son.

4. Parantaca. His elder brother *Harinjaya-raya's* son named *Parāntaca-raya*, having first fought against the

* The title Vijayadi-raya would imply that the first of the Chola kings is meant ; that however is not probable.

† The name of Vira Chola appears in all lists of those kings. It is a mere title, the brave, or champion. The founding of Chittambaram gives a clue to aid from other documents.

Pandiya king, conquered him ; and, taking tribute, was afterwards crowned in *Tanjavūr*, and building an *agrahāram*, on the banks of the *Cāveri* with endowment, he gave presents of land, of cows, and marriage-presents in providing for females, with other charities. He himself married *Chitliri*, the daughter of *Setu-raya ;* by which marriage a son was born to him. Afterwards, by consequence of over-

Hari-mali.

coming other kings, the title *Hari-māli* came ; and subsequently he went to another world ; his wife *Chittiri* burnt herself with his dead body ; but not before many children were born by her. Among the children of that *Parantaca-*

5 Divi.

raya the one named *Divi-raya* being crowned in Tanjore, and governing also the *Drāvida* country, he, after a while, became greatly afraid of *Vira Pandiya ;* and afterwards when *Vira Pandiya* came to fight against *Tanjavūr*, he fought with, and conquered him (that is, the *Pandiya*) and he cut off his ears. In the sequel *Vira Pandiya* went to Madura. In conse-

Hari.

quence the name *Hari-tittu* was acquired, (by *Divi*). That *Hari-tittu-raya* putting a minister in charge at Tanjore, he himself desiring to conquer *Uttra-desa* (the north country,) he went thither, and remaining there a long time, the people of this *Tanjavur* who were of the royal family, or race, heeding not the counsels of, the minister, fought one against another, which the king hearing of by means of messengers (bearing only a verbal statement) he came back; and, destroying the evil ones, he established the good. He cut out water channels for irrigation from the river Cāveri, and distributed the customary charities. He gave the *Tolābaram*, (or his own weight in gold) to the *Brahmans* (and the *Sōdasa-dhanam*) or sixteen other kinds of charity. Afterwards he conquered *Satti Ranaca* of the *Vaidondai* race ; and receiving from him gold, jewels, (ratnam), precious stones, (manicam), and bringing them, he gave them to the *Brahmans*, as presents to *Sri Narā-*

6. Hari-vari.

yana. As he had no child he crowned his younger brother, named *Hari-vāri-deva*. That *H. V. D.* being anointed, and crowned in *Tanjavūr*, during the time that he governed the *Chola*, *Drāvida*, *Congu*, and other countries, his elder brother named *Diviraya* going against *Madura*, with the four kinds of forces, fought against the *Pāndiya* king ; who, being defeated in battle, fled away. He in consequence captured the *Pandiya-desam*, and spoiling *Virinji-puram*, he again came to

Or Raja-raja Chola.

Tanjore. Therefore, as he had conquered a king of kings, he acquired the title of *Raja-raja*.

The mother of this *Pandiya-raya*, who had fled, being a near relative he (only) took from that *Pandiya-raya* a great quantity of wealth, and then giving up that Madura to him, both parties were subsequently on most friendly terms.

Afterwards that king's general, being a very near relation, he himself came to the house of the latter; who being greatly delighted thereby performed the anointing with gold (called *kanaca-abishecam.*)* The king being rejoiced, commissioned him to go and conquer the (adjoining) countries. That *Amarbhujangan* the general, set out, with the four kinds of forces, towards the west to the mountain named *Saiya;* and, thence proceeding to fight against the *Kerala-desa*, he heard that its king was performing the *Chatur-balayanam*, and other ceremonies; in consequence of which he became greatly incensed and conquered (took) *Kotur*, *Indra-giri*, *Nila-giri-durga* and other places; and, as the entire strength of that king failed him, he embarked on board ship and fled into an island in the midst of the sea. Subsequently this general of the *Chola raja*, according to the permission of his master, collected, and deposited all the plunder of riches, acquired in this invasion, in the *Saiva* temple, on the top of the ghaut: and on the extreme west he fixed a conquest-pillar,† with a flag, to denote his victory to that point; and he thus acquired great fame in the world. After that [small chasm apparently by the loss of a palm leaf, which though searched for, throughout the whole collection could not be found.]‡ *Bhimaraya* having heard this news he overcame him that had come hostilely to battle and killed his son. Thereupon he went to fight against the *Calinga-desam*, and taking thence tribute from that country he went to the *Nirmata*§ country; and there also conquered many kings, and in the *Nirmata-desa* he planted a pillar of victory; and in the south, he erected a pillar of victory, on *Mahĕndra* mountain, having a tiger on the flag (the emblem of the *Chola* king as a fish was that of the Pandiya). Then he conquered *Vaidumba-raya*, *Cāma-raya*,‖ *Dhana-vallya*,

* Being presented and lifted above the head. It is still practised, and the gold so offered is given to Temples, Brahmans, &c. being never taken for use by the individual to whom it is offered.

† Jaya-stambha.

‡ The chasm which occurs here is to be regretted. Amarbhujanga had just fixed his jaya stambha, in the extreme west; and disappears. Bhima-raya comes on we know not whence, nor to avenge what quarrel.

§ Confines of the river Nerbudda: but most likely a great exaggeration.

‖ The name of Cama-raya is to be noticed. It occurs in an inscription at Malla-puram. The account of the Chola kings closes with the reign of Raja-raja Chola in S. S. 926, A.D. 1003—4. The next following date of the Oysala race is S. S. 991, A. D. 1068—9 an inter-

Bhima-raya, *Amma-raya*, and other kings; and, taking many jewels and much riches, and as captives, many females of the royal apartments, as also the golden image made to resemble *Bhima-raya*, and coming together with his army he had an interview with the king. The king being greatly rejoiced with the various acquired wealth, he enlarged the temples at *Chidambaram*. His grandfather had built the *Kanaca-sabha* only; but he now with the aforesaid riches erected all kinds of towers, walls, *mantapas*, flights of steps, &c. and other matters: he also had all kinds of valuable ornaments made for *Sabhāpati* (the idol) and thus performed munificent charity. Subsequently he several times made the *Tolābaram*—(his own weight in gold) as a gift to the *Brahmans*. He built and gave many *agrahāras* on the Cauvery, in free grant void of taxes to the *Brahmans*. He also made some grants of land. Then the *Congu-desa* and *Carnataca-desa* being subject to him he, the *Maha-raja Chola-raya*, gave the name of *Raja-Raja-Puram* to the town of *Keriur*, in the *Talicad* district, in the northern part of the *Congu-desa;* and he gave it to the merchants (*Vaisyar*) of *Dalavan-puram;* and by their hands made *agrahāras* for the Brahmans, and gave these to them: these *Vaisyas* having always been accustomed to worship the *divine brahmans*, (*Deva-brahmanar.*) At the same time he performed many other charities *S. Saca* 926 in the *Visvavasa* year, in the fifth day after the new moon, in the *Svati-nacshetra;* in this time, performing charity; being in Tanjore of the *Chola* kingdom, and taking tribute from many countries, he protected the kingdom.

S. S. 926, A. D. 1003—4.

val of 65 years. Nothing of conquest is mentioned; and the reign of Raja-raja was particularly glorious. The author has left something out. He fills up the interval of 65 years by transition to another race; who, for some time at least, had nothing to do with the Chola kings, and when we meet again with the Congu country it is under Palliyacarar, or local chiefs; as is always the case in unsettled periods of Peninsular history.

I have put Raja-raja-chola in connexion with the date S. S. 926, A. D. 1003—4, but it is by no means certain that the doing so is right, for there is the chasm intervening. Thus it stands, "After that * * * * * * Bhima-raya having heard this news he overcame him that had come hostilely to battle and killed his son. Thereupon he went to fight against the Calinga-desam." The *he* and *him*, especially the last *he* cannot be determined, by the M. S. itself. A little further on it is stated that the king's grandfather had built the Kanaca-sabha at Chitambaram. According to the M. S. Vira Chola did so, and there are the intervening names of Desotya, Parantaca, Divi, and Hari-vari; and then comes Raja-raja. From other sources it is known, that the Chola king who fought against, and conquered part of Calinga, was Kulottunga Chola, and that name, I imagine, would appear had the M. S. been perfect.

Up to this period the word Chera-desam has not even once occurred, in the original Manuscript.

Of the race of Oyisāla Kings, from the posterity of Yadu.

Brahma was (born) from the lotus-flower, which sprang out of the navel of *Vishnu*, the preserver of the whole world. By him (*Brahma*) *Atri-rishi* was (born) from the eye of *Atri* was (born) *Chandra*. From him *Budha* : from him *Purūrava*. From him *Ayu*. From *Ayu* (was born) *Nahusha*. From *Nahusha* (*proceeded*) *Yayati*. From *Yayati*, came *Yadu*. Of the race of this *Yadu* many kings ruled in the town of *Dwaraca*, and governed the kingdom. Among those kings one named *Sala* was a king, who set out with a great army for the purpose of hunting ; and came to a hill named *Simmāchala* ; during the time of the hunt he saw there a hare chasing a tiger. He reflected—" this spot is a strong place" (or one fortunate, or propitious to the brave) ; and while thinking so, as that tiger was about to attack an ascetic, engaged there in his devotions, the king killed the tiger, with an arrow. Thereupon that *rishi*, addressing the king, gave to him the title of *Vijaya* (conqueror). As this king named *Sala* killed the tiger there he also gave him the title of *Oyisala* ;* and told him to conquer that land, and gave him the (*varam*) permission to exercise a kingly rule there : he, by reason of this sanction accordingly took possession of the country ; and was crowned king. Subsequently when many years had gone by, as a king of that race was very devout he acquired a reputation like that of *Aditya* (the sun) ; and by consequence was known by the name of *Vinai-āditya* (the devotional sun, or sun of devotion.) That *Vinai-āditya* residing in *Talicadu* subjugated and brought within his power this country, by gradual accessions of territory. He induced the chiefs (*Pālliya-carar*) to be on friendly terms with him, and governing (still) comparatively a small country, as *Talicad* was not suitable to him he went into the *Tuluva*† country, and there took possession of some villages, with connected lands. At that time this *Carnataca*-

Vira-cshetrya.

1. Sala, or Oyisala.

2. Vinai-aditya.

* I think it should be Visala a title of some Jaina kings in the north. The fable of the hare and tiger is in the native style, when professing to account for anything of which they know no better origin, or reason.

† Vinai-aditya gradually acquired territory around Talicadu, and then took possession of villages in the Tuluva country. This statement does not appear to me to accord with the notion of Talicadu being near the modern Mysore. It is moreover added that the Carnataca-Congu-desa was then under chieftains ; that is to say the modern Mysore country. There must be, I think, two localities termed Talicadu ; and I should be disposed to take Telicota north for the one, and Talcad south near Mysore for the other. Mallicarjuna is a northern God. I take the capital of Vinai-aditya to have been Telicota : on the west of which is the Tuluva country, or modern Concan.

congu-desa, which had been accustomed to pay tribute to the *Chola* king was in the hands of *Palliya-carar* (chiefs); while *Vinai-āditya*, ruled this kingdom being in *Talicad*, his minister *Vidya-vinaiya*, gave to *Mallicarjuna-svāmi* (the tutelary God) of *Talicad* a charitable donation of land; having first obtained the permission of his master, *S. Saca* year 991. In *Satārana* year, on the 5th day after the full moon in *Chittiri* month; but the letters (of the grant or inscription) are gone (defaced, or lost). That *Vinai-āditya's* wife named *Kuvala-devi* had a son named *Vallāla*. That *Vallāla-raya*, being in the town called *Sassa*, governed a small extent of country. His younger brother was named *Pedda-deva* (and another) *Utiyāditya-deva*. In union with these persons, he assembled a great army; and took with him his son named *Peddata* and came back again to *Talicādu*, and having conquered the *Congu* chiefs, he was crowned in that same *Talicadu*, and residing there he conquered *Nonampavādi*, *Ganga-vādi*, *Banavasi*, *Anāicallu*; and, being of the *Jaina* religion, he inquired concerning that *Sastra*. His minister (mantri) named *Yēca-kadailcum-ayya*, obtaining permission from the hand of his master, made a charitable donation of ten *Candacas* of land to *Sannakēsu-svāmi*, in *Saca* year 1015, in *Achiya* year, in *Pushya-bahula-tiry-odasi*, on Tuesday. That *Vallāla-raya* had born to him by his wife a son named *Peddata-raya*.* *Peddata-vishnuverddhana-raya*, being anointed and crowned in *Talicad*, he together with his *mantri* named *Madhava-nayaka* having assembled together some forces, by the favour of the goddess residing in *Sassa-puram* he conquered *Tuluva-dēsa*, *Chacra-cuda*, *Muchangi-kollāl*, *Nilā-vali-adurga*, *Rāyarayottamā-puram*, *Terayackur*, *Kottavādi*, *Kerancu*—these and other countries, and governed an extent of country, extending from the west to *Codogu* (Coorg) in *Malayala-desa*, on the north to *Jāti-mali*, on the south to *Congu*, and on the east to *Alam-pādai*, he ruled with great devotedness to his *guru*, and built a palace for himself in *Alāsur-ganda-pura*. While protecting the kingdom (dwelling) in *Talicad* he fought with the invading *Chola-raya*, and conquered him. He also fought much with the *raja* of *Kerala-desa*, and killed a great many of his people.

S. Saca, 991, A. D. 1068—9.

3. Vallala.

S. Saca, 1015, A. D. 1092—3.

4. Peddata.

* The reign of Peddata yields local details of places. It is difficult nevertheless to fix the exact localities. His going as far north as Malwa must be an exaggeration; if not, it seems inconsistent with the position of a kingdom in the south of the Mysore country. Something may depend on determining to what Srirangha his wife went; the one at Seringapatam, or the one at Trichinopoly.

He extended his conquests to the north as far as *Mālava-desa* (Malwa); and taking great riches, he was as a forest on fire (an object of great alarm) to the *Congu-raya.* In prosperity he was like a king of the gods; in personal form like *Manmata;* the protector of those who came to him seeking refuge; the patron of poets (*Cavi-rayar*), and inquiring concerning the *Sastra* of the *Jainas* in his own religion, he fostered and encouraged them. The people of *Guenkanni, Yasalu-vadavar, Ganga-vādi, Nonampavādi* he protected; by discountenancing the evil and rewarding the good: and among his own people he patronized many persons. Afterwards his wife going to *Sri-ranghan,* became of the *Vaishnava* persuasion; and inquiring fully concerning that *Satsra,* she determined that this was the true *Sastra,* and being of firm devotedness in mind, she was a great devotee of the *Deva Brahmans,* and gave great largesses, and had many virgins married to the *Brahmans* (paying the marriage expenses and those of furnishing the household) also paying the expenses attendant on Brahmans assuming the sacred thread: and, after having done all this she with great joy returned to her husband *Pedda-raya,* exhorting him to study or inquire into the *Dherma-sastra* of *Vyāsa,* and counselling him to protect the divine *Brahmans;* and this advice she continued to reiterate: *Pedda-raya* hearing this remained constantly silent. Subsequently *Ramanujācharya* quitting the *Chola-desa* came hither, and as the wife *Peddata-raya* was of the *Vaishnava* persuasion, he sent word to her of his arrival. She being greatly rejoiced, informed her husband, and caused him (*Ramanuja*) to be summoned to the palace. During the conversation as that king insisted that the *Jaina Sastra* was true—the *Jaina Sastra* * * * *

[Here a chasm in the manuscript occurs, which no research could restore. It would appear to be of so much as relates to a change of religion by *Peddata-raya,* who after coming over to the *Vaishnava* credence, obtained the title of *Vishnu-verddhana.* Some *Jainas* were in the employ of Colonel Mackenzie: and his collection contained only one full copy of this manuscript.]

S. Saca, 1021, A.D. 1098–9.

The charitable donation performed by this *Vishnu-verddhana* was in the following manner. *Saca* year 1021 in *Vicrama* year, in *Masi* month, in the *Ardra-nacshetra,* in the *Siva-yoga,* in the *Beva-karnam.* In this time he gave *Kuruvu-nāda,* and *Kuruvu-nama,* village belonging to *Acāji-acamma-yedatur,* to *Pachama-rangha-svami,* in irrevocable manner; being accompanied by the water of the Ganges.

Subsequently the *Dalavayi* (general or minister) of *Vishnu-verddhana-raya* named *Gangai Dendati-raya*, with the sanction of his prince,
S. Saca, 1039. gave to his *guru* named *Suba-chandra-siddhanta-deva* land, in the following manner *Saca* year 1039 in *Vilambi* year in *Panguni* month, in *Sutta-panjami*, on Monday; that is the village *Bavaculam*, for the expenses of the worship
1033. of the *svami* of *Bavukulam;* (Another) grant of land *Saca* year 1033 in *Nandana* year, in *Margasi* month, in *Sutta-ashtimi*, on Monday. The generalissimos of *Vishnu-verddhana* named *Banda-nayaka*, and *Ganga-mantri-sorna-danda-nayaka*, these having asked permission of their master *Pedda-ta-raya* gave lands near the tank of the village called *Peddava-halli* that is to say, to the east (or beneath) the tank to the extent that might be sown by twenty *Salikai* of grain, on the north of the tank forty two *Cambams* of *karum-bumi* (fertile land,) on the west of that tank a small garden of two hundred *kurzis* (2400 *kurzi* make a *mani* or ground) and on that side (20) *Kāmbam* of land for the making of oil.

S. Saca, 1039. In this way they gave charity. In *Saca* year 1039 in *Vilambi* year, in *Chitiri* month, on the 5th day after the full moon (or *bahula-panchimi*) on Wednesday this *Vishnu-verddhana-raya*, consecrated the temple of *Chennakēsava-narayana-svami* at *Pelur*, and appointed for the ceremonies of worship, and the like matters, the village and district of *Vēlā-puram:* in which village the whole revenue, as well as that of twelve connected villages. Besides which he gave *Appa-turai* and *Tagara** these two villages: also *Palavi-nādu* and *Manavi-nadu*, in all twelve connected villages, with *Gajakudam* and other villages: also *Maisa-nādu*, *Pedda-carai*, *Latāndi-nādu*, *Devanur*, and all connected lands and privileges: the whole for the service of that *svami* or god. He also besides gave to it much money; and therewith thoroughly repaired that temple, which had fallen down; and thus performed charity. The record of this transaction is preserved in an inscription on stone, in the wall of the said temple. *Vishnu-verddhana-raya* gave to his wife *Cujantala-devi*, some land. She gave the same to *Dhermēsvara-svami*, for the worship and pouring on of ghee; that is to say, the village of *Lachagai-nadu* and *Kenjanthi* village. The
S. Saca, 1044, A. D. 1121—2. year of the giving of this charity was *Saca* 1044 in *Subakirathu* year in *pushyabahula-dasmi* on

* Tagara an early name of Deva-giri, Deogur, or Dowlutabad: allowing however that there might be more than one place so named.

Monday, when the sun was in the northern hemisphere. *Vishnu-verddhana-raya* together with his elder brother named *Chicraja-deva* gave the following donations of lands. *Saca* year 1045 in *Dunmugi* year, *pushya-bahula-dasmi*, on Sunday when the sun was in the northern hemisphere; that is in *Idei-turai-nadu*, and the island formed by the *Cāveri* and *Cavani* rivers, which island is called *Venisangamam*, to *Agastya-iswara*, the village of *Tiru-mukudal*, was given for worship, and pouring on of ghee, *i. e.* *Tuchilur* with *Vaitali*, situated in *Idei-turai-nādu*. The whole extent of this land was given by an inalienable grant.

Vishnu-verddhana-raya gave the following donations for daily worship and pouring on of ghee, in the village of *Mahābalājalam*, to the goddess of *Mahabalajala-isvara-samundi*, situated on the south quarter of Mysore, *S. Saca* 1050 in *Saumiya* year, in September, in the *Hasta-nacshetra*. In this time, in the Mysore country, he gave *Malalvādi* village to the *Mahabalajalam-isvari-samundi-amman*, in charity. The following is the inscription fixed in the south side of that temple. *Vishnu-verddhana-raya* gave for the worship, and ghee pouring, of the *Jaina* god, the *Tanjai* field (beneath or) to the east of the Mysore lake, to the extent of land which might be sown by five *Candams* of grain; which was given to the Mysore *Jaina* god.

S. Saca, 1050, A. D. 1127–8.

In *S. Saca* 1053 in *Paritabi* (or 46th cycle) year in March, *Vaukula-padmi* on Tuesday, this charity was made.

S. Saca, 1053, A. D. 1130–1.

The detail of the charitable donation made by *Vishnu-verddhana-raya*—made to the *Jaina-svami* in *Paokari*,—and the suburban village of *Paokari*, *Saca* year 1054 in *Pramadichu* year *Asva-sutta-dasmi* on Wednesday in *Puratāthi-nacshetra*, being *(Purva-bhadrapada)* the 25th. In these days to his *guru* and first priest, he gave the following charity: *Vishnu-verddhana-raya* gave *Sevili-nādu Muralai* village to the Brahmans for an *agraharam*, and relinquished it to them entirely exempt from taxation. Besides he gave *Genji-kari* village with its adjunct. *Sāvantana-kari*, the whole annual crop and in *Mukonti-kari* land as much as could be sown by eight *Salikai*, and in *Mutaliyuria-deva-kari* the whole of the land; the whole of the foregoing being in free gift, exempt from taxation; which he left at the feet of *Srikesava-svami;* this was in *Saca* year 1055 in *ānanta* year, *Phalguni-sutta-saptimi* on Wednesday. In this manner *Vishnu-verddhana-raya* performed many other charitable dona-

S. Saca, 1054. A. D. 1131–2.

tions. While he received and trusted in *Ramanujācharyā* he with great devotion, protected many *Vishnu* temples, and was a *Vishnu-bakti* (votary of Vishnu). This same said *Vishnu-verddhana-raya* by his wife named *Lacshmi*, whose face was like the lotus flower, her eyes like the *Karunisam* flower (or *kuvali* flower) her lips like coral, her teeth like pearls, her neck like the *chank*, her hair like the cloud-rain, who was possessed of other excellent qualities, being like *Lacshmi* herself, even by this female named *Lacshmi* he had a son named *Narasingha*, who was reared with great care and attention (*literally* " every day with an increase of stature") ; and, after his reaching his seventh year, he was taught all manner of learning, by the direction of *Vishnu-verddhana-raya* who acquired great fame.

5. Narasingha.

The son of *Vishnu-verddhana-raya* named *Narasingha-raya** was anointed and crowned in *Talicad;* and, in a degree surpassing his father, with great skill (or wisdom) was in veracity like *Harischandra*, in celebrity like *Nala-maha-rāya ;* in kingly munificence like *Parasu-rama*, in anger like *Narasingha*, in gifts like *Carna*, in patience like *Bhumi-devi ;* and in this way with great justice (or equity, *niti*) he held in his hand *Talicad* and other portions of territory, and protected *Congu* and *Carnataca ;* these two kingdoms ; receiving also tribute from *Drāvida-desa ;* banishing the wicked, and protecting the good : protecting the divine *Brahmans :* performing many charities, and making many donations of land, in the time of his ruling****† he extended his power as far as the sea of *mēl-turai* (the west-coast) and so governed the kingdom.

The detail of the gifts of land by *Narasingha*. He established the temple of *Sri-kesava-svāmi* in *Sorna-varam* village belonging to *Nirkunda-nādu*, and he relinquished land for the ornaments and worship of that god. In the *Saca* year 1071, in *Prabava* year, in *Magha-sutta-triyodasi*, on Tuesday, in *Rohini-nacshetra* in sign of the Zodiac Cancer, being crowned, he made the following donations:—he made forty-six presents of cows to as many individuals ; he gave land to the extent of 300 cawnies in *Pasi-vidyam* in the lower district, and 100 cawnies to the south-west of the tank beneath *Maliyanda ;* he gave 26 cawnies beneath the tank named *Pulai;* he gave 25 cawnies

S. Saca, 1071, A. D. 1148—9

* Narasingha seems to have had an extended rule. His chief town was Talicadu, and he protected Congu and Carnata receiving tribute from Dravida; which seems, in this place, to designate the modern Carnatic.

† A small chasm in the Manuscript.

beneath the tank called *Pundēsvari;* he gave 30 cawnies: frcm these he released all tribute and similar things; and besides this he gave to *Sangarada-nayaka's* son, named *Bogana-nayaka*, land to the extent that might be sown by a *candacam* of grain; and to *Parija-raca Maliyan* (that is, the cook *Maliyan*) he gave ten *Kolagams* of land. Thus he performed, and bestowed, charity. *Narasingha-raya* for the purpose of the daily pouring on of ghee and offering to *Aghōra, Siva Pandit* gave the cultivation lands beneath *Pitara-kari*, to the extent that might be sown by four *Candacams* of grain. The year of the gift was *Saca* year 1072 in *Prajotpatti* year *Pushya-sutta-panchimi*,* on Monday in a fortunate time of the sun's being in the northern hemisphere.

S. S. 1072, 1159-60.

Cotānda-nayaka was the general manager of all the affairs of *Narasingha-nayaka:* according to the permission of his master he established a temple to *Tirumali-deva* in *Yadava-giri*, and endowed it with lands in *Saca* year 1080 in *Pramōduti* year. *Sravana-sutta-ashtami;* on Thursday. At this time he gave *Pedd-halli, Inda-nādu, Pake-halli, Seracur, Sirumana-halli, Cuman-halli, Hallē-chintu-kottam, Yeriyur, Cupēkiyatana-halli, Rāndām, Sarange, Pe-pallur, Sara-halli, Matrana-halli*, these fourteen villages he gave in charity, in an unalienable manner. This is taken from a copy of an inscription, in stone, in the Temple of *Tondanūr-gōpala-svami.*

During the time when *Narasingha-raya* governed the kingdom, the charity performed under his sanction by *Paviya-sudāmani* the son of *Sekki-raya*, and of *Locambikai* was as follows: He gave the entire village called *Antapam* to *Kucudēsvara* as a charitable donation. Besides this to his own household god he gave a tribute on tax upon certain commodities; that is a quarter fanam on every bundle of *areca* nut, to every package of salt, one *valam* (a sort of measure): from every bundle of turmeric one seer; from every package of pepper one *valam;* from every bundle of *betal* leaf a quarter fanam: thus taking tribute he, in this way, made charity to the *Covil:* it was in the *Saca* year 1081 in *Vicrama* year *Māgha-sutta-chaturdasi*† on Friday, when the sun was in the northern hemisphere. His conduct was very agreeable to the king. While *Narasingha-raya* was conducting the affairs of the kingdom, one who was his friend named *Peddaiya*, receiving sanction from the king's hand, gave a donation to *Peddēsvara-*

S. S. 1081, A. D. 1158—9.

* Pushya-suddha-panchimi. The fifth day of the bright half of the lunar month Paushya. Reference to a general table at the end.

† Magha-suddha-chaturdasi—the fourteenth day of the bright half of the lunar month Magha; for all other Brahmanical dates see the Table.

deva—for the sake of charitable *puja*, service ; he affixed the name of *Peddēsvara-puram* to the village *Kauna-kerai*, and bestowed it in charity, in the *Saca* year 1082 in *Vishu* year (15 of cycle) when the sun was in the northern hemisphere, in the month *Margasirsha* (that is May—June) on Monday. *Narasingha* having great affection for one named *Paviya-sudāmani* gave to him land, which the said *Paviya-sudāmani* with the king's sanction, bestowed in charity on *Kucudēsvara-svami*, for the sake of *puja* worship ; that is to say four *Kandacams* of land in *Mettanhalli* village which was attached to *Yēpali* village in *Saca* year 1084, in *Subana* year, in *Chitiri* month, on the 5th day of the moon's increase. In that year *Narasingha-raya* made an *agrahāra* of the village *Ari-kerai* ; and consecrated an image called *Sri-malla-nat'ha* ; and for the *puja* and offerings to that *svāmi* and for the repairs of the building, he charitably gave *Kennangūr*, which was attached to *Kumbada-carai-nādu* in full grant, free from tax and irrevocable, in *Saca* year 1084, *Subana* year in *Mārgali** (that is December—January) in the first day of the moon's increase on Monday, in *Danishta-nacshetra*. While *Narasingha-raya* was residing in *Dwara-samudra* by the sanction of the king *Vishnu-danda-nayaka*, son of *Mātana-danda-nayaka*, the minister (*mantri*,) of the king gave in charitable disposal to *Băukulam Cailasēsvara*, for the purpose of secret charitable offerings in *Saca* year 1085, *Tārana* year, in *Pushya-bahula-pādyimi* or the 1st day after the full moon in the lunar month corresponding with Cancer, on Wednesday while the sun was in the northern hemisphere, in a meritorious time (or day) that is to say, four hundred and twenty *kāni* (cawnies) of *punja* (dry) land, in the village of *Băukulam ;* the inscription is engraven on stone in the *Covil* of *Băukula Cailasesvara*.

S. S. 1082, A. D. 1159—60.

S. S. 1084, A. D. 1161—2.

S. S. 1084.

S. S. 1085, A. D. 1162—3.

The inscription of a grant of land given by *Narasingha-raya* to a *Saiva* fane in *Măisur-hoballi-calli* village. The *Mantri* named *Callaiya* by the sanction of the king gave *Pedduravādi* village in charity. He built the *Kovils* of *Sri-rama-nat'ha-devālya*, and *Soma-nat'hēsvara-sivālya*, and bestowed for the purpose of the secret offerings and services in *Saca* year 1093, in *Nandana* year, in *Pushya-suddha-panchimi*, on Sunday when the sun was in the

* M. S. Magha a clerical error for a Tamil solar month.

northern hemisphere from the aforesaid village as much land as might be sown by thirty *Kulacams* of seed from the land beneath the tank.

Narasingha-raya gave to *Govindesvara* and *Vinayaga-bhatta*, to these two as much land as might be (sown by 10) ten *Kulacams* of seed. They gave that land to *Nāgēsvara-devatā* in *Saca* year 1094, in *Vijaya* year, *Chaitra*,* *Suddha-navami*, or Sunday in *Punarvasu-nacshetra*. This is a copy of the inscription in *Chola-vangalam-nāgesvara-svami* (temple.) In this way making besides many other donations, and governing the *Congu* and *Carnataca* countries, having fought with and received tribute from *Kerala*, *Pandiya-desam*, *Chola-desam*, *Andhra-dēsam*, *Varatam* and *Indu-desas*, having received the fame of *rājādhi-rāya* (king of kings) being celebrated under the title of *Vira-narasingha*, he died in *Jaya* (28-cycle) year in the month of April (*lit.* fell at the feet of *Ganga-nat'ha* or *Vishnu.*) He ruled 27 years.

S. S. 1094, A. D. 1171–2.

Subsequently the crown devolved on *Vallāla-raya* his son by *Kuvala-devi*. *Vallāla-raya* was anointed and installed in *Talicad* in *Jaya* year; and, together with his minister (*mantri*) named *Chandra mavuli*, he was as a lion in the estimation of the *Congu-nangavadi* and other *Palliya-carar* (chiefs) and going into *Kerala-desam* with many elephants, horses, and foot soldiers, and troops, he fought with that king, and plundered the whole of *Kerala-desa;* besides which he received from him (its king) much wealth. He also received from * * * * *Nayaka*, of the *Pandya-desam*, tribute and afterwards while reigning in *Vijaya-puram* (perhaps an epithet of his own town " city of victory") he received tribute from the *Gaudar*† and *Palliya-cārar*, and from that place he protected the *Chola* kingdom ; he fought much with the chieftains of *Koncana-desam*,‡ and having gone thither, his people being afflicted with sickness, he left that country, and returned to his own town. Subsequently *Vallāla-raya*, made many charitable donations, and investigating into many *Sastras*, he governed the kingdom, according to *Dherma-sastra*, and bestowed many grants of land on the *rajas* of his own family (relations of the king, royal family.)

6. Vallala.

* The lunar month Chaitra and mansion Punarvasu do not accord.

† Generally owners of villages.

‡ The Northern Konkan.

In the time of *Vallāla-raya* one named *Aran-gaudan* of *Kuriki-nādu* (country) and of *Mullanhalli* village the son of *Kolladi-sanca-gaudan*, built the village named *Aruna-samudra*, and built therein a *Devalyam* (fane) on the lower side of the village tank. He gave to the *Isvara* (image) of that fane by the sanction of the *raya* 800 *valams* of *punja* land, and as much land, adapted for growing rice as might be sown by ten *kulacams*, situated beneath the village tank, in *Saca* year 1095, in *Jaya* year, *Pushya-suddha tithiya* (the 3d day of moon's increase in the lunar month *Paushya*,) on Wednesday ; the date of the inscription. *Vallala-raya* gave to *Siva-sacti Pandit* the *devastanam* (fane) called *Kalēsvara* and for the purpose of offerings therein he gave in charity three *kandacams*, or as much land as might be sown by fifteen *kulacams* of seed, situated on the lower side of the villages of *Koravangal-hobhalli, Sekhanhalli, in Saca* year 1096 in *Manmata* year *Jyeshtha-bahula Panchimi* on Friday.

S. S. 1095, A. D. 1172—3.

The (*mantri*) minister of *Vallāla-raya* named *Chandra-mavuli*,* by the sanction of his master, gave to *Chinnēsvara-svāmi of Baukulam* in the village of *Boman-halli* in irrevocable gift, in *Saca* year 1104, in *Subakirathu* year, *Pushya-suddha-dasmi*, in *Banu-varam* (Sunday) while the sun was in the northern hemisphere, in a meritorious time.

S. Saca, 1104, A.D. 1181—2.

The *Dalavayi* (general) of *Vallāla-raya* named *Cesavēsvara*, with the sanction of his king, bought at a fixed price the village *Padhalli* belonging to *Panjavādi* in *Nirconda-nādu*, or country (or else three villages of those names) which he gave to *Cesava-svāmi*, having affixed to it, the name of *Cesava-samudra*, and had formed a tank *Lacshmi-samudra* in *Saca* year 1131, in *Pramôduta* year, *Pushya-suddha-saptimi*, on Monday, when the sun was in the northern hemisphere, the whole of the lands belonging to that village were so bestowed.

The *Maha-pratani* (Treasurer) of *Vallāla-raya*, named *Camăiya-te-nayaka*, the son of *Onannan*, while residing in the *Virupacsha-osa-*

* In the reign of Vallala we meet with the three distinct office of Mantri, Dalavayi, and Pratani; implying a regularly formed government; except only, that the second should be third. The Mantri is the prime minister, the king's adviser in matters of state; especially in matters of internal government, and externally of peace or war. The Pratani is the Lord High Treasurer; often usurped by the Mantri. The Dalavayi is the commander of the forces. In modern, and weak governments, he sometimes assumed the other two offices; and became "Mayor of the palace;" the king being in virtual confinement; and one shown, as a puppet, occasionally to the people. These remarks relate to Native Governments, in general: not to the Visala dynasty in particular.

durga or (high fortress) and thence protecting the country, he gave to the Poet who was named *Singhi-bhatta*, the village named *Sambikai* in irrevocable gift, exempt from taxation, in *Saca* year 1154, in *Vijaya* year, *Asvini-suddha-tateyu*, on *Guru-vāram* (Thursday.)

S. Saca, 1154.

Thus, in the like manner, performing many charities; never retiring in battle; humbling the pride of many chieftains; receiving tribute from the hands of many kings, and chiefs; while governing the kingdom, his wife named *Kuvitlisi-vāni*, and surnamed *Loca-rhemba*, bore him a son named *Somēsvara** very handsome, and of good sense. Causing him to be instructed in all manner of accomplishments, he nursed him with the care ordinarily bestowed on four or five bodies (with very great care.) He assuming the crown in *Dwāra-samudra* governing the *Congu* and *Carnataca-desam;* and properly causing the *Covils* of the gods to be well built; and performing many of the sixteen kinds of charity; he obtained *Cailasa* (died). The period of his reign was *Saca* 1159.

7. Somesvara.

Somesvara, reign of 40 years.

S. S. 1159, A. D. 1236—7.

His son was *Narasingha raya*, who was anointed and installed in *Dwara-samudra* in *Saca* year 1205. His *mantri's* name was *Perumal-danda-nayaka*. His *Dalavāyi's* name was *Pramasa-mupati*. Together with these he governed the kingdom. That is to say he was in form like *Manmata*, in wealth like *Cuvēra;* in victory like *Parasu-rama;* in bestowing gifts like the *Karpaca* tree; in moderation (or meekness) like *Dherma-raja;* in governing the kingdom like *Rama;* in bestowing lands like *Bala-chacraverti*, in anger like *Isvara*. Thus with many kinds of dispositions with (*gaja-dūrga-patāti*,) elephant, forts, infantry, with many kinds of weapons, setting forth he went to *Congu-dēsam*, and took tribute from its chieftains fighting a great deal in *Kērala-dēsa;* totally destroying the king of *Kērala* and his army. Afterwards friendship being restored, and peace between *Kerala-rama-raya*, and this

8. Narasingha II. 41 years.

S. S. 1205, A. D. 1282—3.

* Somesvara transferred the capital to Turai-samudra that is Dwara-samudra which was south of the river Kistna: probably not very far from the site of Bidenore: but which Col. Mackenzie has identified with the ruins near Hallabi 105 miles North-west of Seringapatam. This point corresponds nearly with the apex of an obtuse triangle, of which the base line would connect Telicota and Talcad. Siva-samudra, on the island of the Cauvery—not far from Seringapatam—was at some early period, a place of great consequence, yet we do not trace it as such in this Manuscript.

king being made, they joined together their forces (they invaded and) took tribute from the *Pandya*, *Chola* and *Drāvida-desa*,* and going as far as to *Calinga-desam* they cut that king and his people to pieces: and then they fought with the Mahomedans who had come from the northward, and conquered them; and returning by way of *Konkana-desa* they there also took tribute; and having come to *Dwāra-samudra*, they made many grants of land, cows, and marriage expenses: and building many *devālyas* (or temples) and giving grants of lands, for the customary offerings, and services therein, they revived the bestowment of the ancient endowments that had been made by *Vishnu-verddhana* in former times. Subsequently the *mantri* of *Narasingha-raya* who was named *Perumal-danda-nayaka*, by the sanction of his king, in *Pollūr* gave to *Sri-mādhava-dēva* to *Sri-rāma-crishna-svami*, to *Sri-valla-hallāla-nat'ha-svami*, the customary offerings; and to 906 *Brahmans*, who were in *Pollūr*, he divided that village into seven portions, and relinquishing six portions to those *Brahmans* he gave one portion to that *svāmi*. Besides this, to that *Kovil*, for drawing the car, and lighting lamps or torches, he gave the well watered villages named *Peddata-kota*, *Pilla-paū-conda*, *Tipūr* belonging to these the smaller villages of *Kuman-halli*, *Art'ha-gāuda-halli*, *Arnai-halli*, *Rama-gāudan-halli*, *Kudi-tarrukena-kota*, *Kittava-gattam*, *Sival-halli*, to the east of the reservoir of *Kiri-keri;* and to the west of the village named *Annankuri* the fields which were * * * * * * * the whole of these lands with the numerous† people on them were given to the before mentioned fanes in Saca year 1206 in *Subana* year, in *Carticey-suddha-padhimi* (on Sunday). On this day he made the charitable donation. *Vira-narasingha-raya* in *Saca* year 1207, in *Vijaya* year, the twentieth of the cycle, *P'halguni-suddha-păurnami* in the midtime of an eclipse (of the moon) gave the village

The munificence of Vira-narasingha-raya.

Vira narasingha-raya, Saca 1206.

S. S. 1207.

* There is a looseness of language as to the acts of Narasingha II., which looks like exaggeration, and hyperbole; as in various other passages. He went, we are to suppose, southward to Congu and took tribute. He fought against Kerala; then made peace with its king. Next, in union with the kings of Kerala, Pandya, Chola and Dravida countries, he went and fought with the king of Calinga, as we may suppose the Ganapati ruler of Warankal: then he fought with the Mahomedans, and returned by way of the northern Koncana country: a very long circuit certainly; though, at the same time, not impossible.

† Obscure in the Manuscript.

Cannilavādi in irrevocable bestowment, for secret offerings,* public processions, and repairs, connected with three fanes, to *Cesava-svami*, to *Narasingha-svami*, and to *Gopāla-svami*, which he had caused to be consecrated in the town called *Vicrama-santanu.*

In the place where *Vira-narasingha* had consecrated three fanes to *Prasanna Cēsava-svami*, *Narasingha-svami*, and *Gopala-svami*, his *Dalavayi* (general) named *Brahma-samupati*, consecrated (a *Kovil* to) *Sada-siva-svāmi :* gave two *vriddhis* (of land) in the village of *Nuki-halli* (of his own ?) and taking from the principal people of that same village, or town six other *vriddhis* of land he bestowed the whole on that *Kovil;* being together eight *vriddhis*. Besides this, that *Brahma-samudē-nayaka* gave to the *pusari* of that *Kovil* two hundred *Cambams* of waste (or open) land, four hundred *Cambams* of *punja* land (dry land for dry grain) and also the proceeds of an extra† tax derived from all kinds of commodities to the amount of ninety five pagodas yearly; paid by the people of *Unkura-kari* village. Besides he gave a garden containing 260 *Cambams* of ground to the east of the river; and he also gave entirely the gardens in the villages *Nuki-halli*, *Angan-halli*, *Sōman-halli*, *Deva-halli*, *Kōsala-karai*, *Gauderi-halli.* The people of *Saūndara-halli*, themselves gave the garden of that village: and also one thousand of open land to the east (or beneath) the village tank, also seven hundred *Cambams* to the east (or beneath) the village of *Matapa-kerai ;* one hundred *Cambams* of open land to the east (or beneath) *Kiru-kadi*, being high forest land measure. In this way bestowing charity they gave the above to *Sundēsvara-svāmi.* From the village called *Pannatakina-kerai*, ninety five pagodas of *Sittaya-varai* (extra tax) and beneath (or eastward) of that *Kerai* (or bund of tank) twenty *Cambams* of open land (*vayel*) and of *punja* land 100 *Cambams*. In this relinquishing of much land he bestowed the proceeds on various *agrahāras*, according to perpetual custom. This charitable grant was in *S. Saca*, 1210, in *Virôdhi* year, the 23d *P'halguni-suddha-paurnami ;* the inscription of the grant was performed on Sunday. The

S. Saca, 1210, A. D. 1287–8.

* "Secret offerings"—I postpone a remark on what I suppose to be the meaning of this term.

† The tax is termed Sittaya-varai. It denotes a sort of "Peter-pence," distinct from the Government tax, for ordinary purposes; for example, if out of 100 Rupees, the Government tax be one Rupee then the Sittaya-varai may be one anna: not entered on the Government account but carried to the benefit of the fane to which it was given.

above is the copy of the stone inscription in the village of *Nuki-halli* in the *Devastānam* (fane) of *Sadā-siva-svami.*

During the time when *Oyisala Narasingha-raya* was governing the kingdom the *Senātipati* (or general) named *Boma-manande-nayaka* gave to one named *Basaven* four hundred *Cambams* of land, from beneath the village *bund* of a tank, which he himself had constructed, together with a tank, by means of seven per cent. from a tax called *Bija*, both of which he purchased with his own money, and gave irrevocably to the aforesaid *Basaven*, with a charge to feed daily twelve *Brahmans* in a choultry, which he (the *Senātipati*) had built in the village of *Nuki-halli*, entitled *Sōma-nat'ha-puram ;* agreeably to which order, that *Basaven* statedly continued the feeding of the

S. Saca, 1235, A. D. 1312—3.

Brahmans ; Saca year 1235, in *Ananta* year, *Carticey-suddha-pādyami :* on Monday the gift of charity was made. This is a copy of the stone inscription in the fane of *Chenna-raya-svami.**

The race of Hari-hara-raya.

Yadu, the so called king, was of the *Chandra-vamsa* (lunar race). Many kings proceeded from that race of *Yadu.* Among them was

1. Sangaman.

one named *Sangaman.*† He having come to the *Dacshin*, to the banks of the *Tungabhadra* river, and dwelling there, he with elephants, horses, chariots, and foot soldiers, these four kinds of arms, conquered the whole of the

* According to the M. S. Narasingha II. was installed S.S. 1205, A.D. 1282—3, and the latest inscription is dated in S. S. 1235, or A. D. 1312—3. The 30th year of his reign. That date however is two years later than the date assigned by Ferishta for the sacking of Dwara Samudra by the Mahomedans in A. D. 1310. The difference of reckoning, by lunar and solar years, may account for the discrepancy. Whether the capital ever recovered from the effects of the Mahomedan capture, is somewhat doubtful. The Manuscript adds nothing about it. Some revival did occur ; but to what extent is not fully known. In about 13 years afterwards Warankal sustained the fate of Dwara Samudra ; and, though in both there were remains of life, yet it is probable that temporary subsequent successes, against the Mahomedans, only paved the way for the ascendancy of the most powerful chieftain of the Native confederacy ; probably the Bukha-raya of the Vijayanagara dynasty. We must still look for some powerful prince also named Narasingha who, at a date considerably posterior, upset the first dynasty at Vijayanagara. I think the scattered remains of power of Dwara Samudra and Warankal were concentered in that chief; whose first locality was probably at or near the later Pennaconda : for to that place, on their final misfortunes, the descendants of that family returned ; as if it had been to their ancient patrimonial domain.

† Among the local papers in the Mackenzie Collection there was one, an account of a northern chieftain in very early times, which I considered as probably the pedigree of Sangama. I regret not having been very particular in my attention.

Dacshin ; and taking possession of all the kingdoms, he kept on foot a great army. His sons were *Bukha-raya*, *Hari-hara*, *Sambu-raya*, *Maraba-raya*, *Muttupa-raya* : thus five children were (born) to him. Among these five the one named *Bukha-raya* was possessed of much good sense, courage, and of a handsome form. That is to say among the five *Pandavas* as *Arjuna* was, so was he : in that way he was fearless in war. While abiding on the banks of the *Tungabhadra* river, inasmuch as he conquered many countries, he constructed, in that place, a town with many streets, with many lofty buildings, a fort like to *Yamacuti* (mountain) surrounded with a moat like the *Tungabhadra* river ; within it many kings' palaces. Thus with great splendour and wealth, the town *Vijayanagara* being ornamented, was like the dancing place of *Soba-Lacshmi* (of great plenty) and was (called) *Vijayanagara-patnam*, as being possessed with the fame of many conquests. While he *(Bukha-raya,)* was ruling in this *Vijayanagara-patnam* he made many offerings *(pujas)* to *Siva* and *Vishnu* for the sake of (obtaining) a son ; and subsequently, by his wife *Gauri-ambikai*, a son was born, resembling *Subrahmanya*, born from *Isvari*, and as he was the fruit of honors rendered to *Hari-hara* (*Vishnu* and *Siva*) he was in consequence named *Hari-hara-raya.* He knowing all kinds of science, became celebrated ; he was named *Hari-hara-bukha-raya.*

2. Bukha-raya.

3. Hari-hara-raya.

This *Hari-hara-raya* being crowned in *Vijayanagara*, and with elephants, horses, and other kinds of arms, having conquered many countries, he also subdued eighteen islands ;* and taking tribute from many countries he performed a great many acts of munificent liberality, within his own realm. Subsequently his son *Deva-raya* was crowned : his younger brother named *Hari-hara-raya*, was born with great courage, and much beauty. *Deva-raya* being seated on the throne, adorned with the nine kinds of jewels, was installed in the sovereignty ; and became chief patron of the realm in *S. Saca* year 1270, in *Virōdhi* year,† *Karticeya* month, in the tenth day of the dark half of the

4. Deva-raya.

S. Saca, 1270, A. D. 1357—8.

* If the dwipa be not rendered island, then the number forbids rendering the term according to the Pauranic Geography. Perhaps it is a mere hyperbole ; as if indicating 18 unknown countries.

† The date of S. S. 1290, A. D. 1357—8 is given as that of the installation of Deva-raya. If we allow 40 years for the two foregoing kings it will give circiter S. S. 1230, A. D. 1318 for the foundation of Vijayanagaram by Bukha-raya ; who must be regarded as properly

moon's age on Friday in the *Uttra-bhadrapada* lunar mansion, in the *Priti-yoga* (or astrological constellation) in the *Bava-karanam* (astrological division). In this favourable day the illustrious king of kings—king *Paramēsvara Sri-vira-pratāpa-deva-raya* took tribute from the *Carnātaca, Chera, Chola, Pandya, Kerala** and other kingdoms. He ruled the kingdom according to the *Dherma-sastra ;* and gave many donations of lands, cows, and marriage dowries. The manner of grants of

Deva-raya-mahatmyam, S. S. 1270.

land made during the time of *Deva-raya* is the following. Having built anew thirty-two houses in the *agrahāra* of the town of *Deva-raya-puram*, he established therein the families of thirty-two *Brahmans*, thoroughly versed in the poetical art, and publicly, by pouring water from his hand into their hand, irrevocably made over the same by a perpetual gift. After-

5. Hara-bukha.

wards *Hari-hara-raya* the son of *Hari-hara-bukha-raya* in S. S**** was seated on the throne of nine kinds of jewels, and crowned in *Vijayanagara* and associated with *Ganda-danda-natha*, as *Dalavayi*,† he governed the kingdom with great equity. That is to say in courage he was like *Deva Indra*, in victory like *Arjuna*, in destroying courage he was like the *Rudra* of the *Pralaya* time (deluge) ; in munificence of gift like *Parasu-rama ;* in wealth like *Cuvēra ;* in beauty and kingly equity like *Dasaratha-rama ;* in meekness (or moderation) like *Varuna ;* in form like *Manmata :* thus with many (splendid) qualities he was *Sācshāt-hari* (a second *Vishnu*). While thus protecting the kingdom his *mantri Ganda-danda-nayaka* was the faithful copy of *Sumantra* the minister of *Desaratha*, and like him with many of the four kinds of forces, and many warlike weapons, with the consent of his prince, he set out with the desire of conquering the kings of the world ; and, proceeding northward, he subdued and took tribute from the countries respectively of *Calinga*, *Anga*, *Vanga*, *Camboja*, *Simdla*, *Tuluva*, *Māgadha*,

first in this dynasty. That is rather earlier than the period assigned by some other authorities. There is however an ascertained connexion between the fall of Dwarasamudra and Warankal (A. D. 1323) and the rise of Vijayanagara ; aided by the weakness of the Mahomedan government, for some time afterwards.

* Here first occurs the word Chera in the Manuscript ; and it is here distinguished from Kerala. Further remark is reserved.

† The intimation of an equality between Hara-bukha and his Dalavayi, Ganda-danda-natha is of consequence to be observed ; for some lists confuse kings, and generals, or rayas and dalavayis, together ; and thereby add to the number of princes. Ganda was also Mantri it seems, and by consequence, every thing. The victories ascribed to him agree as to time, and circumstances, with the losses of the weak, and wicked, Mahomed 3rd of Delhi.

Malava, and *Varada;* subsequently he fought, for a long time, in *Padsha-desa*, the land of the *Turushcaras* (*Dekhini* Mahomedans) and cut the *Turushcaras* to pieces; and, taking from those kings much treasure, he fixed a pillar of victory in that country. Hence he proceeded and conquered the *Saindhava* and *Gujara* countries (Sind and Guzerat or Cutch ?) and succouring the *Indu-desa-raya* (king of Sind ?) he conquered and fixed triumphal pillars (or columns) in the *Concana Malayala*, *Kerala*, and *Pandiya* countries. In the *Chola* and *Drāvida*, and other countries he took much treasure, many *vāhanas* (carriages) arms, and other things, and bringing them to the king he, the minister of *Hari-hara-raya* received from the great king of kings the *Raja Paramēsvara* many additional armorial banners. Then *Hari-hara-raya* being greatly pleased gave to him the name or title of *Vira-ganda-danda-maha-samupati*. The *Brahmans*, *Cshetriyas*, *Vaisyas* and *Sudras*, the four orders of men, being greatly rejoiced, they placed joyful confidence in the king; being persuaded that there could not be a king equal to him in kingly qualities, in the whole world.

Afterwards *Vishnu-deva-maha-raya* * * * * a small chasm occurs * * * *Hari-hara-raya* gave to *Sama-veda-yajna-narayana*, *Mukili-bhatta*, *Cāli-natcha*, and *Somayājin*, (four persons) the town of great *Cadalūr* which was connected with petty *Cadalūr*, and *Grāmala-halli*, and belonged to *Sandi-grāmam*, in the *Oyisala* country. By means of these four persons he performed (or made) twelve *Sva-siddhi** in

S. S. 1303, A. D. 1380–1.

the *S. Saca* year 1303, in *Durmati* year, *Margasira-sucla-pacsham*, in the 11th day, and gave the above gift (to the *Brahmans*) in irrevocable donation, by pouring out of water. Affixing to that town the name of *Hari-hara-puram* he acquired great renown.

6. Vishnu-deva.

Vishnu-deva-maha-raya† being crowned in *Vijayanagara*, governed with great equity the *Telinga* and *Carnātaca* countries: he established many *Vaishnava* temples; and endowed them with lands, for the secret services, and other matters connected therewith. He took tribute from the *Concana*, *Ma-*

* I am not able positively to determine the meaning of Sva-siddhi otherwise than by its apparently literal rendering, a voluntary sacrifice, or gift, which appears to be the meaning of the context: and applicable to a bestowment of land.

† The author was going on to Vishnu-deva; but checked himself; left a small chasm; and introduced the munificence of Hara-bukha: then resumed.

Here occurs the endowment of Vaishnava temples for "secret services." What those secret services were in Vaishnava fanes cannot with precision be determined.

layala, and other countries, and gave donations of elephants, and other things; and, being illustrious as the sun, he at length acquired *Swerga*. He had two sons respectively named *Mallicarjuna*, and *Immadi-deva-raya*. *Mallicarjuna* being crowned in *Vijayanagara*, and being associated with his younger brother *Immadi-deva-raya*, and also with *Timmana-nayaka*, as *Dalavayi*, he protected and governed the *Andhra* and *Carnataca* countries. He also conquered the country to the south of these; and desiring further tribute, he proceeded with many horses, elephants, and other warlike equipage to *Kerala-desam*, and warring with the *Kerala-rája*, he took thence much treasure, many jewels, and other matters, and again returned to *Vidya-nagarapatnam*.* Subsequently governing the kingdom with great equity, he built many temples and Brahman's dwellings; and gave to his own favorite God *Mallicārjuna-svami*† of *Talicad* much treasure and land, for the secret services of the temple, and performed much charity. The *Mantri* of *Mallicarjuna* named *Timmana-nayaka* built a large car for *Pachama-rangha-svāmi*, *S. Saca* 1376, *Yuva* year, *Pushya* and *Suddha* (*Yecadasi* or) 11th day on Friday, when the car for *Sri-rangha-svāmi* was finished; and the public procession with it was performed. Subsequently in *Saca* year 1377, in *Dāthu* year, *Sesha-suddha* the 11th day, the principal wife of *Timmana-raya* named *Rangha-amma*, voluntarily gave for the secret services of (the temple) of *Pachama-rangha-svami* the village named *Rangha-puram* in the temple district of *Onē-mādu*, situated in *Cura-vanga-nāttu*. That *Timmana-nayaka* caused the temple itself to be well built, and gave to *Rangha svami* many gifts of land.

7. Mallicarjuna, with Immadi-deva and TimmanaDalavayi.

S. Saca, 1376.

S. Saca, 1377, A. D. 1454—5.

* Vidyanagara.—From other documents we learn that the site of the future metropolis was a sort of hermitage, where Madhvacharya dwelt; hence called "Town of Learning." The sage is generally understood to have assisted the sons of Sangaman with his counsels, and more solid aid, against the Mahomedans.

† Mallicarjuna-svami of Talicad. What Talicad? One placed south of the modern Seringapatam; or one a little north of Anagundi or Vijayanagaram. To me the latter seems most likely. And though Talicota differs from Talicadu, yet it is only thus—Talicadu would be the earlier name, and Talicota would come into use after a fort had been built.

We find "secret services," again, and Mallicarjuna is I believe a name of Siva. Timmana is termed Mantri, and before Dalavayi: hence it is clear, that he held the reins of Government. It almost necessarily follows that Mallicarjuna-raya and Immadi-raya were two puppets; according to a frequent case of Hindu rule; and to that circumstance probably is to be attributed the invasion (whether with or without treason cannot be determined) of the Yadava chief Naraṣingha, and the consequent change of dynasty.

CHANGE OF DYNASTY.

The race of Vira-narasingha-raya.

Of the *Srimat* race of the moon *Yadu** was born. Of that race of *Yadu* there were many kings, and many branches of dynasties sprung therefrom. Among these the *Tuluva* race was one; in which *Timma-rāya*† was greatly renowned for courageous conduct in war. He greatly exalted the *Tuluva* race; and was esteemed very holy in the world. From him a king was

* Although Bukha-raya was of the race of Yadu, yet the Yadavas, is a term used in the Mackenzie Collection as distinct from Ganapatis-rayas, or Oyisalas, or Bellalas, and is applied to the chief of a territory cut out from the Warankal kingdom south of the Krishna river; subject, at first to the rayas and then superceding them; after which, and for some time, the Vijayanagara power was felt, down to the extreme south of the Peninsula; including Mysore partially; the Carnatic prevailingly; and the old Chola and Pandya countries. To this stupendous monarchy we are now advancing.

A paper in the Mackenzie Collection (see my third report, or M. Journal L. and Sci. vol. 8, page 24,) marks the commencement of the Yadavas in S. S. 755 or A. D. 832—3; and gives eighteen successions, down to S. S. 1013 A. D. 1090 a total of 250 years, with an average of 14⅓ years for each reign. But the object of the writer seems to have been to give a connected series of dates; since he introduces the very incongruous persons of Pratapa-rudra, Bellala-raya, and Anavema-reddi, with each a very long reign from S. S. 1071 to 1233, and then enters on the Vijayanagara dynasty: assigning to Bukha-raya the very probable period of S. S. 1249, A. D. 1326—7. Of the list some are Mantris or Dalavayas; but it is here introduced in comparison with our present Manuscript authority.

Bukha-raya........S. S. 1249, A. D. 1326—7.

	Hari-hara..............	S. S. 1263		Saluva gadu.......	S. S. 1319
	Vijaya-bukha..........	„ „ 1276	10	Deva-raya..........	„ „ 1334
	Hasaki or Gaja-deva...	„ „ 1284		Ganda-yadava......	„ „ 1339
5	Rama-deva............	„ „ 1291		Cumara-camba.....	„ „ 1343
	Virupacshi............	„ „ 1296		Saluva-gadu........	„ „ 1350
	Mallicarjuna...........	„ „ 1303		Saluva-narasingha...	„ „ 1399
	Rama-chandra....	„ „ 1312	15	Immadi-timma.....	„ „ 1410

Vira-narasingha........S. S. 1431, A. D. 1508—9.
Krishna-deva.......... „ „ 1451, A. D.
Achyuta-deva.......... „ „ 1464.
Sada-siva.... .... „ „ 1486, A. D. 1563—4.
Tirumali-deva.......... „ „ 1494.
Sri-rangha.............. „ „ 1508, A. D. 1585—6.

In our Manuscript Rama-raya, a natural son of Krishna-raya, and Dalavayi to Sadasiva, appears instead of the latter; who, in point of real power, was a cypher.

† It is presumed that Timma-raya and Timmana-nayaka, were two distinct persons. If not it would follow that Timma-raya, being Dalavayi, conspired against his master, and secured the crown for his son. This conjecture is forbidden by two leading circumstances. It does not accord with Ferishta's notices of Narasingha, as a rebel chief; nor with the great alteration superinduced on the old Canarese language, by the Telinga conquest: affecting generally the termination of nouns, as well as minor matters. Language bears testimony to such changes: as for example, the English language after the Norman conquest, and the Portuguese after a French alliance by marriage.

born by *Bukha-māsāni*, a crowned wife. From him was born one named *Narasingha-raya*, who was very equitable, of benevolent disposition, of handsome form, eminent in personal strength. *Narasingha-raya* in the town of *Vidyanagara* was installed, and crowned, being seated on the throne adorned with the nine kinds of precious stones. In conjunction with his minister named *Uttandi* he governed the *Telinga* kingdom. Subsequently as the chiefs and warriors of the *Carnātaca* country refused to pay him tribute, he dispatched his minister *Uttandan*, at the head of the four kinds of forces ; who going into the *Carnātaca* country warred with them, and taking captive one called *Sivadhiya-raghaiya*, he afterwards caused him to be crowned ; and having taken tribute from those chiefs, he proceeded thence to *Malayalam* and *Keralam;* and there fighting with *Vijaya-raja*, he took from him great wealth, and making friendship with the *Pandya* king, he received from him many auxiliary forces, and taking tribute from the *Chola* and *Drāvida* countries, he proceeded thence to the north country ; proceeding as far as the *Calinga* and *Bangāla* countries ; and as the king of that country came to meet him with a great army, he conquered them, and killed the *Gajapati** king ; and, as then the king who was ruling on the banks of the Ganges came with a great force, he conquered these also : he likewise overcame many Mahomedans ; and having taken much wealth, many horses, elephants, and the like, he returned to *Vijayanagara* town ; and, in an interview with *Narasingha-raya*, he told him all that had occurred. Thereupon *Narasingha-raya*, being greatly rejoiced, gave to this minister the title of *Vijaya-uttandēndra*, and built many *devaliyas* (fanes) with the wealth which he had brought. Especially he built the *kovil* of *Virupācshe-dēva*, with great elegance ; and making grants of lands, of cows, of marriage portions, and other sixteen kinds of charity, he acquired great celebrity in the world. Thereupon all kinds of kings gave to this *Narasingha-raya* the titles of ‘ king of kings,’ *Raja-paramēsvara-raya-maha-raya ;* and, in interviews with him, offered to him all kinds of presents. Then the *Maha-raya* being rejoiced gave to them severally, splendid garments and various other honorary gifts ; and thus acquired great fame ; even as far as the *Himālayan*† isthmus. This great Rayer's wives were *Dipācshi* and *Nagarā-devi ;*

1. Narasingha-raya.

* The Gajapati was the ruler of Orissa ; and the Ganges king probably the ruler at Gaur in upper Bengal.

† Himalaya Setu, is a common proverbial expression.

from these two, even as from *Causili* and *Sumitri*, those two women, were born *Rama* and *Lacshmana*, so to him were born *Vira-narasingha-raya* and *Krishna-raya*. From his wife named *Obambiga* were born *Rangha-raya*, and *Achyuta-raya*, like *Krishna* and *Rama*. These four persons being very valiant, having acquired many accomplishments, riding on horses and elephants, they grew up with very great union and affection existing among themselves. Subsequently in *Saca* year 1401, in *Sārvari* year, the 34th year of the cycle, *Narasingha-raya* acquired the heavenly world. The *Maha-raya-vira-narasingha-raya* was installed and crowned in *Vijayanagara* town, being seated on the nine jewelled throne, in the same *Saca* year 1401, in the *Sārvari* year, *Vira-narasingha-raya* in conjunction with his younger brother, ruled the kingdom with equity ; and on sending messengers to demand tribute from those countries which had paid tribute to his father *Narasingha-raya*, the *Drāvida*, *Chola*, *Pandya*, these countries sent some small measure of tribute, and making friendship with this *Vira-narasingha-raya*, they then went away. The chiefs who ruled over the *Carnātaca* and *Congu* countries, and resided at *Unmuttūr*, *Talicad*, and other royal towns, refused to pay tribute ; in consequence of which *Vira-narasingha-raya*, being much incensed, assembled many forces, and with many elephants, horses, men and other forces, made warlike preparations, and placing his younger brother *Krishna-raya* in *Vijayanagara*, he himself with *Achyuta-raya* and *Sri-rangha-raya*, and with many princes of royal descent, went and encamped (or descended)* near to *Unmuttur*. Thence he despatched messengers with this message: "If you send us the tribute which was formerly accustomed to be given, we will here confirm and establish you in the government, and depart ; but if you do not despatch the tribute we will take your fort, and placing our own people in it will assume the government of your country." Then the king who was in *Unmuttur* named *Diyabarāya* sent a reply to the following effect—" We ourselves have for a long series of years governed this kingdom, and whether it be our own people or that of the *Concana-verma*† kings, who for a long time

Died S. Saca, 1401, A. D. 1478—9.

2. Vira-narasingha-raya crowned, S. S. 1401.

* The Tamil word used seems to answer to the phrase to set down before a place.

† The country invaded was Carnata and the Congu-desa. Diyaba-raya refers to the Concana-verma kings. These were rulers of Tuluva ; having a Capital at, or near Banavasi. I cannot reconcile all discrepancies ; but I do not think this language accords with a Capital south of the modern Seringapatam.

ruled here, it was never customary to pay tribute to any one. Such being the case your father *Narasingha* having conquered by force took tribute, and went away. But if the matter be properly investigated, there is no existing right or claim that I should pay you tribute. By consequence we will by no means send you tribute." *Vira-narasingha-raya* on receiving this message was very angry; saying—"Since these chiefs were accustomed to pay tribute to *Harihara-raya* and others, what occasion is there now for discussion or inquiry?" Whereupon he proceeded to invest the fort, and fought against it for three months. Those chiefs, assembling a great force, beat the besiegers, and did not allow them to approach near to the fort. Then *Narasingha-raya* being unable to take that fort, retrograded his army, and proceeded to invest the town of *Sri-ranghapatnam.** Heretofore the great *Narasingha-raya* had installed and crowned *Sivaki-raya*, in that place. The son of that *Sivaki-raya* had greatly strengthened that place with fortifications, and he now sent word to the *Unmuttur* and *Talicad* chiefs and calling thence many forces he issued outside of the fort, and meeting *Narasingha-raya*, in the outside with a great force, he fell upon him there. Then *Vira-narasingha-raya*, sustaining a slight defeat, retreated with his army, and came back to *Vidya-nagara* and said to *Krishna-raya*, that *Unmuttur* and *Sri-ranghapatnam*, being well secured, we must assemble a very great army, and having provided full supplies of provisions, we must then conquer those kingdoms. Consulting thus they continued to rule the kingdom. Subsequently *Vira-narasingha-raya*, performing many acts of charity, gave presents of gold, equalling his own weight, *Kala-purusha-dhanam*, gifts of gold in hills, or heaps, gifts of horses, of elephants, of lands, marriage presents, *Brahma-pratishta-dhanam;* making all these, and placing many gifts of food in the public Choultries, he became in giving presents of land equal to *Parasu-rama*, in reputation; and acquired the surname, or titles of *Rajādhi-raya-Paramēsvara*, *Pravuda-pratāba-maharaya:* in *Saca* year 1425, in *Rudrōtkari* year, he acquired entrance into *Vaicont'ha.*

Died S. S. 1425, A. D. 1502—3.

3. Krishna-raya crowned, S. S. 1426, A. D. 1503—4.

Subsequently the crown descended to his younger brother *Krishna-raya.* In *Saca* year 1426, in *Ractācshi* (58th cycle) year in *Chittri* month, *Krishna-raya* being installed in the nine jewelled

* The precise direction of retreat, or retrogradation is not stated; but the terms here employed, could agree with a Capital south of Seringapatam.

throne in *Vijaya-nagara* town he associated with himself his younger brothers *Achyuta-raya* and *Rangha-raya* and his minister * * * * and ruling the kingdom with great munificence, he established a Mint, which was *Krishna-murti.* In it he performed a charity to *Ranghanayaka* (the god). Subsequently he well built the fort of *Vijaya-nagara;* he also built *Pennur* fort, *Chandra-giri* and other fortresses; and assembling a great many people, he got together many elephants, horses, and other forces; and with the intention of conquering the kingdom, he went into the *Drāvida** country where he took *Kanchi* (*Conjevaram*) Gengi, Vellore, and other places; and very carefully built the fort of Vellore. In it he placed his own people, and princes of royal descent, and governed the kingdom with distinguished equity.

At that period the king of *Unmuttur* alone among the other *Carnātaca-rayas,* took possession of *Siva-samudra* (an island in the Cauvery) and as the Cauvery river entered that fort at two ends, or sides, he built that fort very well, and strengthened it with many cannons, and other arms; after which that *Diyaba-raya* acquired *Swerga.* In that fort his son *Ganga-raya* governing the kingdom, he carefully secured that fortress by many arms, and many troops. Afterwards the *Raya Krishna-raya,* having fought with the *Carnātaca*-chiefs, and being desirous of capturing that country, seeing that in former times his brother *Vira-narasingha-raya* had gone into that country, and returned without victory, as they did not give tribute, he nourished great anger against them: he set out with elephants, horses, foot soldiers, cannon, and other arms, with the assistance also of some of the country chiefs, and approached the Cauvery in the *Carnātaca* country, to the eastward of *Pachima Rangham,* and invested the fort of *Siva-samudra,* having also associated with him *Chica-raya*† the enemy of the *Siva-samudra* chief, and also some other chiefs; setting down his army on (beneath) the two hills called *Pret'ha-parvata* and *Kēurya-mali,* he prosecuted the siege more than a year; and at length, proceeding along the artificial bank of the Cauvery, scaled the walls, and entered by surprise; in consequence of which *Ganga-raya* threw himself into the deep tank, called *Ganga-susi,* and perished. Afterwards *Krishna-raya,* having taken posses-

* Krishna-rayer's conquest of the Carnatic, either by himself or his generals, is well authenticated. He also ruled by a viceroy in the Pandya kingdom; though the viceroy speedily became independent.

† We have here the first mention of the chief whose family were the modern Mysore rajas.

sion of that fort placed his own people in it ; and coming to *Sri-rangha-patnam* he also conquered that town. In that town he relinquished some countries to *Camba-gauda*, and *Virapa-gauda :* he also gave over some countries to *Chicca-raya*, and having conquered all the chiefs round about in that country, and fixing agents in the various places, he established the tribute money, and had it written in his account books, that the *Carnātaca* country was to yield him the revenue of a crore. He greatly strengthened the great town of *Sri-rangha-patnam* of the *Carnātaca* country, in the *Saca* year 1430, in *Prabava* year, and erected a very large sized flag-staff there, in the flag of which the *Chank* and *Chacra* being represented it was called the flag of *Krishna-raya*. Proceeding thence he progressively passed through, and conquered *Codugu* (Coorg), *Malayalam*, and *Keralam ;** and fixing the scale of tribute, he took possession of *Pāndya-desam* and *Chola-desam*, and thence returned to *Vijayanagara*. Thence with many troops, chieftains, many horses, ammunition, balls, and arms, he set out like a second (another) sea, and proceeding to the Northward, he made a treaty of alliance (or formed friendship) with the king of the *Calinga* country, and taking that king along with him, he went through the *Hindu* country, and conquering the *Gujara-dēsa*, and *Māgadha-desa*, and also subduing many other countries, he took thence tribute ; and, overcoming many Mahomedans,† he returned to *Vidyanagara* city ; and being seated on the nine jewelled throne, he enjoyed great fame and was known by the titles of *Yadu-kulōtbhava-raja, Martanda-raja, Gembira-maha-raja, Bhujedha-krishna-raya-maha-raya*, (or the Emperor *Krishna*, the great Emperor, the great king honored by other kings, the far famed king, the king illustrious as the sun, the ruler of the race of *Yadu*) having been renowned even to *Himālaya*, he protected the kingdom in conjunction with *Sada-siva-raya*, generalissimo of the forces, and performed many acts of munificent charity. He gave heaps of gold like *Meru*, and others of the sixteen kinds of charity ; and acquired *Vaicont'ha* in the *Saca* year 14—. The following is the manner of performing a gift of land in the *Saca* year 1429 to *Pachama-rangha-svāmi*, made by *Harikē-*

S. S. 1429.

* The conquest of Kerala is authenticated by the Kerala-ulpatti. I have looked into the early part of Colonel Wilks' work to see if there were traces in it of the foregoing transactions, but do not find such ; and the details which are given require other aid to join in well, with this our present Manuscript.

† The defeat of the Mahomedans is admitted by Ferishta ; but it led to that combination which, not very many years afterwards, subverted the dynasty.

rājayya of *Sri-rangha-patnam* by the direction of *Krishna-raya.*

S. S. 1445. In the *Saca* year 1445 in *Pārt'hiva* (19th cycle) year, *Māgha-suddha-paurnami*, in an eclipse of the moon, in a propitious time, *Sri-krishna-rayeraverkal*, gave a meritorious grant conveying to *Immadi-tāttachārya*, the son of *Tattacharya*, the son of *Veda-murti-tirumali-Tattacharaya*, a tax of one pagoda, each year, on every house of the 37 families of the *Camuvar* tribe, in the town near the banks of the *Tunga-bhadra* at *Udiya-giri*, near to the *kovil* of *Krishna-svāmi*, and for the purpose of carrying on in it the offerings, and customary ceremonies, and also a fee of one fanam from each person of every couple on being married. In the 37th year of *Krishna-raya* * * * * * * * * a space, or chasm, here occurs in the Manuscript.

After that the younger brother of *Krishna-raya* who was named *Achyuta-raya* being seated on the lion-seat in *Vijayanagara* city, governed the *Drāvida*, *Andhra*, *Carnātaca* countries, and with one

4. Achyuta-raya, 18 years. *Chenna-pannen*, his generalissimo, together with *Rangha-raya*, and other princes, he governed the kingdom with great equity; ruling the *Drāvida*, *Andhra*, *Carnātaca*, kingdoms, with a great army, he protected the forts of *Chandra-giri*, *Pennaconda*, Vellore; and performing many munificent acts of charity,* he favored the divine *Brahmans*, more than his predecessors, *Vira-narasingha-raya*, and *Krishna-raya*, and was beneficent to all orders of people: he also expended much wealth on *Pachama-rangha-svāmi*, and caused the car-festivals, and

S. S. 1480. other festivals, to be conducted, and during the *Saca* year 1480 in *Sidhartiri* year of the cycle, he fell at the feet of *Rangha-nayaka*, (died) the period of his reign was 18 years.

5. Rama-raya. Subsequently the son of *Krishna-raya* named *Rama-raya*, being crowned† and installed in the nine jewelled throne in the city of *Vijayanagara* along with his younger brother *Timma-raya*, with his generalis-

S. S. 1481, A. D. 1558—9. simo *Sada-siva-raya*, he governed the *Drāvida*, *Andhra*, and *Carnātaca* countries; and having

* Inscriptions, and particularly at Conjeveram, confirm this statement.

† The Manuscript is here incorrect; but it gives the real power to the right person. Sada-siva succeeded Achyuta, and inscriptions are in his name; but Rama-raya, his relative, as Dalavayi, held all power; and was, in effect, regarded as the monarch, Sada-siva being weak and despised.

been inclined to conquer the north country, having assembled many forces, he set out with a great many people and troops, and going into the north country, he fought there with the Mahomedans,* and conquering them, came back again to *Vidyayanagara* city ; and governed the kingdom in such a way that no one was equal to him. At a later period hearing that the Mahomedans of the north country were assembling many troops, and intended to come hostilely against *Vijayanagara*, *Rama-raya* set out with all kinds of forces, to meet them ; and on the place where the battle was fought, as the Mahomedans that came were in very great numbers, he retreated† without victory ; and coming to *Anagundi* he left a few people there ; and taking thence all kinds of provision, he proceeded thence to *Pennaconda*, and fortified that place. Then *Rama-raya* and the Mahomedans, by treaty, divided the country and the Mahomedans took possession of *Anagundi*, and also of some other portions of the country. *Rama-raya* residing in *Pennaconda* itself, governed the kingdom. His sons were *Sri-rangha-raya*, *Rama-raya*, *Vencatapati-raya*, three persons. Afterwards *Rama-raya* acquired *Swerga* in the *Saca* year 1496, he ruled 15 years.

S. S. 1496, A. D. 1573—4.
6. Sri-rangha-raya.

Subsequently *Sri-rangha-raya* being crowned and installed in *Pennaconda*, *Saca* 1496, in *Iva* year, *Rajadhi-raya Sri-rangha-raya* being his title, and acquiring fame ; he placed his younger brother *Rama-raya* in Seringapatam, and his other younger brother *Vencatapati-raya* in *Chandra-giri*, he governed the kingdom very equitably ; and during the time when he was performing many acts of charity *Sri-rama-raya* who was in *Sri-ranghapatnam* died. Then *Camba-gauden* and *Virapa-gauden* these two persons strengthening Seringapatam sent tribute to *Sri-rangha-raya* at *Pennaconda*. Then *Chicca-raya* a chieftain having assembled many people, stormed the fort of Seringapatam, and capturing it, he also subdued the district or country belonging to it. *Sri-rangha-raya* hearing this intelligence, he called the son of *Rama-raya* who before ruled in Seringapa-

* Rama-raya's first successes against the Mahomedans, not yet fully prepared and united, would seem to be fully authenticated.

† The writer is very delicate here. He does not choose to write, defeated. The generally received account is, that Rama-raya lost his life, by his rashness, on the field of battle at Telicota in S. S. 1486, A. D. 1564. Some accounts agree with this, in representing him as retiring : but this was most probably Sada-siva, who quitted Anagundi, and retired to Pennaconda. The Mahomedans came and took possession of Vijayanagaram ; which thenceforward, in their orthography, became known as Bijnagu r.

tam who was named *Tirumali-raya*, and bid him go and take possession of Seringapatam. Accordingly *Tirumali-raya* having fixed *Matti-Vencataraya* as *Dalavayi*, and having come to Seringapatam, with a great army, *Chicca-raya* relinquished the fort over to him, as being the son of the former ruler. Then *Tirumali-raya* being in Seringapatam, subdued and took possession of the country.

Tirumali-raya.
S. S. 1506, A. D. 1583—4.

Tirumali-raya was crowned and installed at Seringapatam in the *Saca* year 1506 in *Pārt'hiva*—being seated on the throne adorned with the nine kinds of jewels, and together with *Matti-Vencatay-yaya* the *Dalavayi* he subdued the whole of the *Carnātaca* country ; and giving over much land to *Sri-rangha-nayaka* and seeing to the repairs of temples, he conducted munificent donations according to the manner in which former *rayers* had done; and acquired the renown of a king of kings.

S. S. 1512.
7. Vencatapati.

In *Saca* year 1512 in *Kara* year *Sri-rangha-raya* who was in *Pennaconda* acquired *Swerga*. His son *Vencatapati-raya* was installed in the government at *Pennaconda*, and ruled that kingdom. In *Chandra-giri*, the governing prince was *Vencatapati-raya*, the younger brother of the before mentioned *Sri-rangha-raya*.

Things being thus, *Tirumali-raya* having heard intelligence that *Virapa-nayaka** of Madura, with all kinds of people was coming, he called all his troops, and together with his *Dalavayi*, *Vencatapati-raya* he went by way of Pyney, and fighting with them, conquered them, and the Madura-one, being overcome, retreated. The *Dalavayi*, *Vencatapati-raya*, having called the king, and following, he plundered the whole of the Madura country. *Madura Virappen* having given to *Vencatapati-raya* much wealth, he being thereby greatly rejoiced, the said *Vencatapati-raya*, by craft, delivered over *Tirumali-raya* into their hands ; and he himself coming with all his forces to Seringapatam, ruled the kingdom. Subsequently *Tirumali-raya*, getting released from their hands, on coming to Seringapatam, *Vencata-raya* not allowing him to enter, drove him away. Thereupon *Tirumali-raya* went and resided in the village of *Malinga-cesari*. Then all the chiefs listening to the speech of *Vencatapati-raya* came, being determined to reject *Tirumali-raya* and laid siege to the town of *Malinga-cesari*, at which time the Mysore *Raja-raja-*

* Details on this warfare may be seen in Oriental Hist. M. SS. translated Vol. 2, page 182—3 and 237—13: they are also mentioned by Colonel Wilks, in his History of the South of India.

Udiyar, with his own force, coming to *Cesari*, discomfited those chiefs, and wholly beating them, he thence came to Seringapatam: as all the forces were with *Vencatapati-raya*, a few people stealthily entered by way of the towers; and subsequently *Raya-Udiyar* entering took possession of the fort, *Saca* year 1531, in *Saumya* year, when the kingdom came into possession of the *Raya-Udiyar* of the Mysore race of kings.

S. S. 1531, A. D. 1608—9.

ADDENDUM.

I have been reminded, by the way while writing these notes, that a stanza in the *Nigandu* (a Tamil versified Dictionary) defines the epithet *Cheran* (vide Introduction), as a title which applies to the *rajas* of *Tiruvanchi* (Travancore) of *Codugu* (Coorg) and of the *Malayala* country proper: that is, as I take it, of North Travancore and Wynaad, near which was the Southern end of *Kerala,* when distinguished from *Chera-desa.* Col. Wilks (vol. 1, p. 8,) on what authority is not mentioned, states—" *Cheran* united *Kangiam* and Salem, to the dominions of *Kerala,* or Malabar."

The use of the Brahmanical reckoning in *Carnata* and *Telingana* introduced to this Manuscript is not, to the best of my knowledge, usual in Tamil documents. The Tamil language retains its own proper solar reckoning; antecedent to the influx of Brahmans from the North; but it has adopted the cycle of 60 years. The name of the cycle year is generally given; and sometimes the *Saca* year. The latter is not to be received implicitly, even when clearly given; but a reason for dissent should always be shown. The Tamil solar year begins with the *Pongal*-feast; the northern Brahmanical year begins with the middle of April. The addition of the lunar months, and asterisms, and days of the moon's age, give intricacy, sometimes approaching to confusion. Hence I have referred more than once to a table at the end. Let the Tamil reckoning be first distinctly cleared. The cycle years common to both modes

of reckoning may be seen in Oriental Historical M.SS. vol. 2, p. 121, or with the northern orthography in Campbell's Telugu Dictionary, Appendix p. 10, 11. The Tamil solar months are :

1. Tai, Jan. 12, to Feb. 11.	7. Adi, July 15, to Aug. 14.
2. Masi, Feb. 12, to Mar. 11.	8. Avani, Aug. 15, to Sept. 14.
3. Panguni, Mar. 12, to April 11.	9. Piratasi, Sept. 15, to Oct. 15.
4. Chittari, April 12, to May 12.	10. Arapisi, Oct. 16, to Nov. 14.
5. Vaiyasi, May 13, to June 12.	11. Carticeya, Nov. 15, to Dec. 13.
6. Ani, June 13, to July 14.	12. Margali, Dec. 14, to Jan. 11.

The Northern solar months are :

1. Mesha,* aries, March, April.	7. Tula, libra, Sept., October.
2. Vrisha, taurus, April, May.	8. Vrishchica, scorpio, Oct., Nov.
3. Mithuna, gemini, May, June.	9. Dhanus, sagittarius, Nov. Dec.
4. Carcata, cancer, June, July.	10. Macara, capricorn, Dec. Jan.
5. Sinha, leo, July, August.	11. Cumbha, aquarius, Jan. Feb.
6. Canya, virgo, Aug. Sept.	12. Mina, pisces, February, March.

With the Northern solar months, the lunar months are made to coincide, by intercalations. Each lunar month is divided into two, or more *Nacshetras*, termed mansions, and as $2\frac{1}{4}$ *Nacshetras* correspond with one zodiacal sign, or thereabouts, it follows that there are only 27 lunar mansions, with an Abhijit, or intercalary portion.

Observe first the general coincidence of Solar and Lunar months.

Solar.	*Lunar.*	*Solar.*	*Lunar.*
1. Mesha.	Aswini.	7. Tula.	Chaitra.
2. Vrisha.	Cartica.	8. Vaishchica.	Vaisac'ha.
3. Mithuna.	Margasir-sha or Agrahayan.	9. Dhanus.	Jyaisht'ha.
		10. Macara.	Ashara.
4. Carcata.	Paush.	11. Cumbha.	Sravana.
5. Sinha.	Magha.	12. Mina.	Bhadra.
6. Canga.	Phalguna.		

Where mention occurs of the lunar month, the corresponding solar month is hereby seen ; and the corresponding Tamil solar month can be found, by looking back, with sufficient accuracy.

The next thing is the correspondence of the lunar mansion with the lunar months ; as follows :

* Anciently coinciding with the middle of April, N. S.

Months.	*Mansions.*	
1. Aswini,	(27 Revati),	1. Aswini, 2, Bharani.
2. Cartica,	3. Critica,	4. Rohini.
3. Margasirsha,	5. Mrigasiras,	6. Ardra.
4. Paush,	7. Punarvasu,	8. Pushya.
5. Magha,	9. Aslesha,	10. Magha.
6. Phalguna,	11. Purva, and	12. Uttara Phalguni, 13, Hasta.
7. Chaitra,	14. Chitra,	15. Svati.
8. Vaisac'ha,	16. Visa'cha,	17. Anuradha.
9. Jyaisht'ha,	18. Jyesht'ha,	19. Múla.
10. Ashara,	20. Purva, and	21. Uttara Shadha.
11. Sravana,	22. Sravana,	23. Dhanista.
12. Bhadra,	24. Satabhisha,	25. Purva, and 26, Uttara Bhadrapada.

Abhijit or $\frac{1}{4}$ mansion, whenever used, comes in between *Uttarashadha*, and *Sravana*.

By this table the relation of the lunar mansion, to the lunar, and northern solar months, and to the Tamil solar months, can be determined with tolerable correctness.

Observe next each lunar mansion, corresponds or nearly so, with the *bright* and *dark* half of each lunation : the days of each are termed *tit'hi*, which do not correspond with solar days ; though it is customary in Tamil to use the term as equivalent to a day of the month. That however is a loose usage.

The bright half of a lunation is termed *Sucla*, or *Suddha, pacsham ;* and the dark half *Krishna*, or *Bahula, pacsham.*

The day of the new moon is *Amāvāsya*, and of the full moon *Purnami, paurnami, punnama*, or *pūrnam.*

A cypher must be understood to represent each.

Thenceforward the *tit'his* are reckoned by Sanscrit numerals. Padyami 1st, Vidima 2nd, Tadiya 3rd, Chavuti 4th, Panchami 5th, Shashti 6th, Saptami 7th, Ashtami 8th, Navami 9th, Dasami 10th, Yecadasi 11th, Dvadasi 12th, Triyodasi 13th, Chaturdasi 14th.

The attentive reader may now untie any Brahmanical date occurring in the Manuscript ; and will perceive that to translate every such date would be a tedious circumlocution, or needless tautology.

The time of a solar eclipse is considered suitable for a gift to avert great danger. The *Suddha-panchimi*, or 5th day of the crescent moon, is deemed propitious. The moon attains a benign, or sextile, aspect ; and danger from the conjunction is past. The *Yecādasi* is,

or ought to be, a strict fast. The origin appears to be medical ; for, in some popular tales, a certain king, by observing and enforcing this fast drove death out of his kingdom ; who complained to the destroyer ; and to cause, by device, the breaking of this fast was the only remedy. Other tales narrate the greatest losses incurred, rather than violate this fast day. We may hence note the great ascendancy which a Calendar Brahman must necessarily acquire ; since such a one alone could tell at what precise point of a solar day the fasting must begin, and end.

As regards " secret services," which though often referred to I have not before taken up, I may observe that, in *Saiva* temples, they appear to me to denote, human sacrifices. Such services in *Vaishnava* fanes I do not pretend to understand. According to the *Garuda-purana*, as quoted by Col. Vans Kennedy (Ancient and Hindu Mythology, p. 340, 342) the days for this cruental service of *Cāli* are the 9th *tit'hi* of each lunar half month, and the 3d of *Margasirsha.* The invocations on those occasions are of terrible import, and the sounds *Hram ! Hrim ! Hrum !* look like signals for slaughter. Col. Vans Kennedy was notwithstanding a staunch advocate for what is termed Hinduism. I have understood from another good authority that there were under ground caves at *Anagundi* wherein human sacrifices were offered, and such doubtless were the " secret services." My personal opinion is, that the Grecian " mysteries" were not merely of the like subterranean, but also of like sombre, character.

Some time since Walter Elliot, Esq. very kindly favored me with loan of a pamphlet entitled, " On the Geographical limits, History, and Chronology of the *Chera* kingdom of Ancient India : by Mr. J. Dowson." The same gentleman has since informed me that the document was printed in the Proceedings of the Royal Asiatic Society. My long retirement from studies, and pursuits of this kind, and being otherwise occupied in very active duties, not quite harmonizing with those studies as to the tone of mind proper to each, prevented my inquiring for, or seeing those Proceedings : and the pamphlet

came to me, without my previously knowing of its existence. It will not be needful for me to add to what I have already premised, in reference to the rather too great stress laid upon a few passing expressions, in my brief notice of the Manuscript in question, in my first report on Mackenzie Manuscripts. It has all the courtesy that could be expected from a stranger; and I would therefore pass by the introduction without remark.

I conceive it probable that the translation which Mr. Dowson used was made by the late Mr. Wheatley of Madura, and being aware of his free manner in translating, I am not surprised at some errors thence entering Mr. Dowson's abstract. Such as I have noticed will require to be specified.

Notes on a Comparison with Mr. J. Dowson's Abstract.

P. 2, line 5.—*Aristanan*: in my Manuscript the reading is *Arrichannan.* The date 4 is doubtful.

P. 3—5.—*Naganandi*, according to my Manuscript was not "minister to three rayas" but *guru* (spiritual preceptor) to the three *Jainas* specified in the translation.

P. 3—7.—*Sankaracharya*: the M. S. states merely *Sancara*; a name of *Siva.* The conclusion based on the word is too weighty to be borne out.

P. 3—7.—" Installed in A Sal. 100." The Manuscript does not state installed; but that the grant, afterwards mentioned, bears that date. The 100 (like 4) is uncertain.

P. 3—7.—" A deed of grant—*in* the temple." The M. S. does not state that the deed (or inscription) is *in* the temple.

P. 3—8.—" Installed in S. 111,"—" reigned 51 years"—not supported by the Manuscript.

P. 10.—" *Saumya*" (43d of the cycle year), M. S. *Subakiratu* (36th.)

P. 4—11.—" *Pūrva-dik* (eastern country)," M. S. " to the South."

Tālakād or *Dalavan-puram*, M. S. *Dalavan-puram* (the metropolis) of *Tălicādu.*

13.—" Countries near the *Kanavai*," M. S. Some provinces near to the foot of the mountain passes."

14.—The " *Mantri Senapati*" as if one person.

M. S. The *Mantri*, the *Senāpati*, and others.

15.—" A Sal. 288," not in the Manuscript, but in the margin.

16.—" *Dorney-veerota-raya*, (*Dharma-virodhi* or *Punya-virota*, the unjust *raya*"—doubtful.

17.—" The military art," M. S. *Danur-vidya* archery, science of the bow.

P. 5—17.—" *Brahma-hatya-raya*," M. S. *Brahma-arri*, enemy of the *Brahmans*. The emendation would make him a killer of Brahmans, which is perhaps too strong.

18.—" He obtained possession of all the *desas*," M. S. he conquered many countries.

19.—" *Chera*," M. S. *Congu*.

20.—" The advice of his youngest brother," M. S. elder brother, probably uncle.

22.—" *Sivaga*," M. S. *Siva-rama*.

23.—" *Pārthiva*" (19th cycle year), M. S. *Prahbava* 1st cycle year.

P. 6.—" *Dravida-raya* in *Kanchi-desa* :" M. S. *Canchi-patnam*, (i. e. Conjeveram.)

28.—" Attacked him"—not borne out by M. S.

Ranganād-swami,—M. S. *Ranghana-svami*, for *Rangha-natha-svami* (i. e. *Vishnu*.)

Chola Conquest.

P. 6—29.—" *Vedar*" *rajas*, M. S. *Verdars* (wild huntsman) of the king.

P. 7.—*Tālakad*, M. S. *Tălicādu*.

30.—" Saw the *Sabhāpati*," M. S. heard sound of a drum, and thought it to be the *Sabhāpati*.

31.—" Ruled the *Chera* country," M. S. *Congu*.

P. 8—34.—" *Virenjipuram*"—supposed to be in *Dravida-desa*, referable to following annotations.

" *Kollur*, *Indra-giri*, and *Nila-giri*, countries."

" M. S. places (a town, and two mountains).

" Buried," M. S. deposited.

" *Bhima-raya*"—abruptly introduced without explanation.

" *Push-kama-dik* (western country)," M. S. South, and, a *jaya stambha* on *Mahendra*, see annotations.

Chera-desa, M. S. *Congu-desa*, "north of the *Chera-desa*," M. S. northern part of the *Congu-desa*.

Remark.—As the best mode of softening down discrepancies, it may be conjectured, that in the Manuscripts followed there may

have been various readings. In some cases the differences may have been conjectural emendations by Mr. Dowson.

A few further comparative annotations appear to be called for, by the nature of the subject under notice.

As regards the boundaries of the *Chera* kingdom, there is the great fact assumed, that the Manuscript treats of the ancient *Chera* kingdom. It uniformly points to the *Congu-desa*. Mr. Elliot once told me that in northern inscriptions he found that country mentioned. In the paper on *Hindu* inscriptions (M. J. L. and S., vol. 7, p. 216,) in a note I meet with the terms *Kanchi* and *Kangya-desam*,* which I conceive to be dialectic for *Kanchi-desam;* a part of the *Chola* kingdom, or of our modern Carnatic. As regards the two stanzas quoted from my work, I feel bound to express regret at haste or negligence, on my part. By a little attention I think they will agree with each other; and with the prose extract also. In the first I see there is a salutation omitted by me.

1. To the north, the place (or fane) Pazhana-hail! to the east *Chengodu*.
2. To the west point, *Kozhi-kūdu* will be. The sea shore of
3. The margin, that will be the south: an eighty *Kādams*.
4. The *Chera-nad* boundary; speaking, say thou.

The other stanza.

1. To the north the place *Pazhani*-hail! to the east the south *Casi*.
2. The west point *Koli-kudu* will become. The sea shore of
3. The margin, that will make the south. An eighty *Kādams*.
4. The *Chera-nad* boundary; speaking, say thou.

Then the prose extract.

On the north *Pazhani*, to the east the great town (or *Perur*) on the south the sea, on the west the great mountain, from east to west, forty *Kādams*, from south to north, forty *Kādams*, making together eighty *Kādams*.

My hastily inserting *Tri-chengodi*, for *Chengodu* without pausing to consider, or indeed knowing at the time, that there is another *Tri-chengodi* near Salem, was faulty. I do not regard this last as the locality meant. To the correction given, page 11th, "*Vadakutalam-pazhani*," (i. e.) north the *St'halam-pazhani*. A *St'halam* is a

* Literally "hot country." Col. Wilks has the same word Kangya, evidently for *Congu*.

holy place," &c. I would cheerfully submit, were it accurate; but there is the dative case, and north is simply the nominative. *Talam* has many meanings in Tamil; but I admit the sense of "place" (the general *Sanscrit* meaning) with the superinduced sense of fane, or "holy place;" because such evidently is the meaning. I cannot admit the "clerical error" of substituting *v.* for *zh.* If a letter were changed it would be the latter into *l.* But "the easy clerical error" would hardly have got into two stanzas, and a prose document. Hence, as far as that evidence is concerned, *B'havani-kūdal* cannot be the place meant by *Pazhani:* neither was *Trichengodi*, in Salem district, intended by *Chengodu*, or *Ten-Cāsi.* Two of Mr. Dowson's boundaries are, I conceive, quite wrong.

The boundaries, in so far as the three authorities are concerned, I conceive to be as follows:

On the extreme south, for certain, the sea.

To the north, or on the north, the modern Pyney. To the east *Chengodu* or south *Casi*, or the great town. To the west *Kozhi-Kudu* or *Koli-Kudu*, or the great mountain.

When there is no desire to force a meaning these bounds are very plain: *Chengodu* is the same as *Ten-Casi;* and *Koli-Kudu* (Calicut) and the great mountain near it, are one.

Look now at a map, and you have South Travancore narrowed in by the ghats to *Ten-Casi*, moving thence north by the line of ghats to Pyney, west of Dindigul; and a line carried thence through *Paulghat* will cut the sea-shore at some distance north of (Calicut,) the western boundary.

Such I conceive to be the *ancient* limits of *Chera-desa* proper. It does not follow that such are the bounds of the *Congu-nād.* These I take to be the same line prolonged to Coorg, for a western boundary; a line running from Pyney to *Caroor* and the Cauvery for an eastern boundary; and the Cauvery with its line prolonged up to Coorg, for a north eastern boundary: the enclosure being triangular, or nearly so; but possibly with a boundary on the north, and from the north, or north-eastern, boundary the *Carnataca-desa* apparently commences.

That the *Chera-desa* and *Congu-nād* were not one, or always one, appears from the existence of two different capitals. *Kōli* or Calicut was the metropolis of the former; and, as we find in our Manuscript *Scanda-puram*, or *Talicadu*, or *Dalavan-puram*, of the latter.

Here I may advert to the note at foot of p. 12 in which, as a

title of the *Chera-rajas*, is mentioned "Colly verpen, Lord of the Colly mountain in Salem." Although it be Professor Wilson who is responsible : yet the same is an error. *Kôli-verpen* and *Kôli-vēntan* are titles of the *Chera* Kings : but *Kŏlli* is one of the distinguishing mountains of the *Chola* kingdom. There is not only a difference in the quantity of the vowels ó and ŏ; but in the consonant *l.* In Sanscrit there is the common *l*, and the heavy palatine used only in the Vedas. This last *l* is used in *Kōli*, and the common *l*, doubled in *Kŏlli.* Another capital of the *Chera-nād* was *Vannāsi* (not that *Banavasi* of Potolemy, as I once wrote with as much care as I wrote *Trichengudi.*) I think it must be distinct from *Kôli.* *Vannāsi* and *Vānchi* or *Tiru-vānchi* are most common in Madura writings. The *St'hala purānam*, for example.* Other stanzas than those quoted make *Peru-vali*, the great plain, or *Vannāsi Perur*, the great town *Vannāsi*, the western boundary of the *Pāndya* kingdom. I would submit whether *Nedum pureiyūr* would correspond with *Perūr*, this is 'great town' or district, that is 'long town' with a district, and according to Dr. Gundert (M. J. L. and S., No. 30, p. 140) this is the site of an old temple near Palghat, and the probable site of the *Pala-cādu-raja.* If there were anciently a large town there, it would accord with *Vannāsi.* *Virinji*, or *Tiru-vanchi*, is another town of the *Chera-desa*, which Mr. Dowson has apparently transferred high up in the *Chola* kingdom ; because a *Virenji-puram* is now found there.† But the town seems to have given the common appellation of Travancore corrupted from *Tiru-van-kudi :* for *kudi* or *gudi* in the extreme south is equivalent to *palli* northern Tamil, or *halli* in Canarese, that is 'a hamlet ;' which every town at first is. I do not know if I ought to dwell on the boundaries given from a Tamil verse by Professor Wilson. "The *Palini* river on the north, "*Ten Casi* or Tinnevelly on the east, *Malabar* on the west, and the "sea on the south." That a Tamil verse should have in it the term "Malabar" is impossible; and one cannot conjecture what word a translator may have so rendered, he may have meant the *Malabar* coast, which would agree with *Kozhi-Kudu* or Calicut. The boundaries given by Professor Wilson, and quoted from Mr. Dowson (from Des : Catal : Int. p. 62) may be allowed to pass, as a general approximation ; only supposing the *Chera* and *Congu-nād* to

* In a question of this kind a good authority. In the 42d *Tiruvalliadel* a messenger is stated to have been sent from Madura, who set out, passing woods and mountains, till he reached the Malayalam country, and came to Tiruvanchi the Capital.

† See p. 8, and note.

have been at some period one. It begs however the question, because it proceeds on the assumption, in the Catalogue, that the *Congu-desa-rajakal* is a history of the *Chēra-rajas;* which I submit it is not; but only of a few rulers in *Congu-nād*, before the latter was conquered by the *Chola* king. I cannot submit to Dr. Francis Buchannan's authority, unless I were assured that he too has not confounded *Congu-nād*, and *Chera-dēsa* together. They *may* have been one: but there is no proof of the fact that I know of. I cannot but remark that in Mr. Dowson's Map the placing of *Mushika* in South Travancore, the *Chēra-desam* proper, is a very singular proceeding. Not a word is written, as to authority for doing so. The ancient division of *Tuluva*, *Cuva*, *Mushika*, and *Kerala* (which last is the term used in the *Kerala* Utpatti, and *Kerala Mahatmya*, as synonymous with *Chera-desam*) must not be tacitly confounded. *Tuluva* was the northern portion; *Cuva* with *Mushica* (preserved in Musiris or Mirjee) the middle portion; and *Kerala* (*i. e. Cherālya* with the *Ch.* hardened in passing into Sanscrit, a very common case) the Southern. *Kerala* is mentioned in our Manuscript as distinct from *Congu;* and *Carnata;* but I have not observed it mentioned as distinct from *Chera-desa.* Both are beyond just question, one and the same.

The precise locality of *Scanda-puram*, I have no means of ascertaining. I must except to its being termed, "The capital of the *Chera* kingdom," which it certainly was not. If the Manuscript note, alluded to by Mr. Dowson, placing it west of the Guzzelhutty pass be valid, well. To me that locality does not appear happily to accord with the statement of *Tiruvicrama* setting out to the conquest of the *Dacshin*, the word really employed; that same *Dacshin* being the *Chola*, *Pandya*, *Kerala*, and *Malayala*, countries. If the designation given, by the document translated, be worth much, it indicates for *Scanda-puram*, a locality not much south of the parallel of Madras. The *Chola* kingdom was nearly east of the Guzzlehutty pass. The term *Scanda-puram* however is a mere epithet—the town of *Subrahmanya;* easy of invention, and readily made to agree with kings, as I conceive but imperfectly, and traditionally, known. It is not till the time of *Hari-verma*, and *Vishnu-kopa* that we approach historical accuracy. They ruled in *Dalavan-puram*, described as the metropolis of *Talicādu*—the latter term indicating a district; and in the *Carnatacadesam*, not *Chera*, nor even *Congu*, but *C̄arnata.* The fixing of *Dalavan-puram* to the site of the ruins termed *Tālcād*

on the north bank of the Cauvery, and about thirty miles east of the modern Seringapatam (Dowson's Essay, p. 13) is an important point gained: if definite. I cannot object; and am disposed to acquiesce; though from time to time, in my notes, I have thrown out doubts. I fear that the position of the northern *Telicota* would not accord with the site of *Dalavān-puram ;* nor yet with an indication given towards the close of the documents as to warlike operations by *Krishna-raya* in the Mysore country. On the whole, from Colonel Mackenzie's, and other writers' notices of the ruins of Tāl-cād (as a *Jaina* locality) I have long wished to pay the site a visit, a wish which possibly may be gratified. It is certain that after the *Chola* power had been broken, and the *Congu-nād* had been divided among chieftains, and next brought under the *Oyisalas*, that then the capital was farther north-west at *Dwara-Samudra*, or Hallabidu; the ruins of which are also of antiquarian interest.

I must beg leave to except, in passing, to the terming *Kalyana-pur* "a name of Madura." Professor Wilson took that name (as I found posterior to former remarks on the subject) from *Vira-Saiva* documents, in the old Canarese language; which transfer all the ultra *Saiva* proceedings at Madura, without ceremony to *Kālyan*, the capital of the *Chalukyas ;* and connect them *seriatim*, with the contests of *Basava*, and *Chinna Basava*, with *Bijala-raja*. This observation is only by the way.

As a specimen of loose inference I quote the following: "The "assertion of our M. S. S. that the last *Chola-raja* mentioned plun- "dered Virenji-pura, a place, as before stated in the neighbourhood "of Vellore in this *Desa*, would indicate that the whole of this *desa* "was not then subject to the *Chola* kings."

It is assumed that there was only one town of that name, and this town, near Vellore, ancient. The singularity of a *Chola* king attacking Madura, marching up near Vellore, plundering *Virenji*, and then returning to Tanjore, does not appear to have excited doubt. But the march to Madura, thence to Travancore, and back to Tanjore, is easy, and natural.

The next important point of notice is the dynasties of rulers, with their periods of rule. And as more stress is here laid upon a passing remark of mine, than in the introduction, it may be incumbent on me to observe that by the expression "well supported by dates, in general referred to inscriptions; which are mentioned," I, by no means, intended to recommend an implicit submission to such dates.

My meaning does not appear to have been entirely misunderstood. It was a comparative indication. Many M. S. S. either have no dates, or merely cycle dates, or simply the year of a king's reign; which as Mr. Elliot has remarked in a like case, "in a period extending over some centuries indicates no definite epoch." To find a *Saca* year, or date by inscription, affords a sort of relief in such inquiries. So much I meant, and no more. A resolute hand may insert a *Saca* year, or a date *quasi* of an inscription; the general credibility of a document requires to be tested; and though I do not withdraw my comparatively good opinion, yet I do not rely myself on the early part of this document; nor implicitly on any part.

The following para. by Mr. Dowson I would compare with one in my fifth report. Mr. D. remarks—"The McKenzie collection contains nearly five hundred inscriptions, procured in the country subject to these (*Congu-desa*) kings. Some of which probably belong to this dynasty; but unfortunately none of them appear to have been translated." My fifth report contains the following passage:

M. S.—Book No. 52, Countermark 1021. "According to the English label this book originally contained copies of inscriptions from the South of India. The number assists in referring to the Des. Cat. Vol. 2, p. 126, from which it appears to have consisted of 126 copies of inscriptions, on stone and copper-plate, from Coimbatore, Caroor, and Darapuram. The book, as received by me, has only the covers: *all* the inside being wanting. How this loss occurred I cannot say; but I return the envelope simply, as received."

In my third report there is notice of a connected M. S. Book, No. 50, C. M. 1019, which in Section 3d, contains 173 inscriptions from that neighbourhood. The intermediate Book No. 51, C. M. 1020, possibly was lost, or subtracted.* It might have given the remaining 191 inscriptions. If however the whole were of no greater value than those in Book No. 50, the loss is not very great. It may not however be a digression to remark how some of these bear on our subject.

No. 4.—Town of *Carur*—King *Kulottunga-Chola.*

6.—Gives attestation to a *Chola* conquest of the ancient *Congu-desa.*

7.—Date 9th year of *Rājēndra-dever.*

8.—23d of *Kulottunga-Chola*, the decapitator of the *Pandiyan*, and possessor of *Carur.*

* No. 53 C. M. 1022, is abstracted in my 5th Report: the dates are chiefly modern.

No. 10. Date 9th year of *Rajĕndra-chola.*
12. „ 24th „ of *Vira-chola.*
13. „ 24th „ of *Rajendra-chola.*
14. „ 3d „ of *Vicrama-chola.*
16. „ 15th „ of *Vira-pandiya.*
17. „ 6th „ of *Sundara-pandiya.*
20. „ 24th „ of *Raja-raja-dever.*
21. „ 25th „ of *Kullottunga-chola*, the ruler of *Izham, Madura*, and *Carūr.*
31. Date 19th year of *Vira-rajendra.*
(Six inscriptions cut out by somebody unknown.)
42. Date 5th of *Vira-pandiya, Saca* 1402, A. D. 1478—9.
44. „ „ of *Vira-chola-deva, Saca* 1044, A. D. 1121—2.
45. „ „ of *Vira-vallala-dever, Saca* 1244,—1321—2.
75. „ in two fanes near *Alaga-mali* (10 miles from Madura,) many inscriptions which could not be made out.
82, 83, 84, are wanting.
124 to 127 five long inscriptions cut out.
131 *Saca* 1678, (A. D. 1755—6) time of *Krishna-rayer-udiyar* of Seringapatam.
144 to 148 five long inscriptions cut out.
166 contains title of *Svasta-sriman-Pratapa Chacra-verti, Bhosala, Bhuja-valla-vira Vallala-dever:* noted for the sake of the title *Bhosala.*

I have not copied off all modern dates, nor those of *Pandiya* or *Chola* kings often recurring. But the above will give some help in our inquiries. And besides they show that the inscriptions, connected with that locality, have had a too attentive consideration from some unknown spoliator. Let us hope that the information, gained by the plunder, may one day be made known; which would be the only adequate apology.

It is not my intention to offer remarks on the reigns of the *Congunād* rulers. It is rather surprising to find a native author content with only an average of 34 years to a reign. I have already intimated that the earliest dates cannot be depended on. If they could be rectified, the average would be reduced. As regards the date S. Saca 816, A. D. 893—4 assumed as that of the reign of *Malla-deva*, second of the name, I would observe that the date going just before S. Saca 800, A. D. 877—8 is safer; because the gift by *Gunaluttama* was of necessity in his reign; whereas the foundation of the

temple is introduced by the term "Subsequently." Still the difference of 16 years is not great. But as Mr. Dowson made a considerable mistake in taking *Sancara-dever* to mean *Sancara-achārya*, the necessity of the very bold emendation of leaping over eleven reigns from *Vicrama* 1st to *Vicrama* 2d is quite obviated. I know not what is "unfair" if harmonizing by such a process be not so. It is not unlike the leap from *Travancore* to Vellore. Geography and Chronology will not bend to such hardihood.

From these, as they appear to me, vague inferences—1st, the temple founded in A. D. 894, 2dly, a conjecture that *Cheruman-perumal* (the name of a dynasty) ruled about the ninth century—and 3dly, the above *emendation* bringing *Sancarāacharya* and *Vicrama* II. together, Mr. Dowson assumes a period nearly corresponding with A. D. 900 as the date of the *Chola* conquest. But, at any rate, we ought to take *the* unforced language of the Manuscript into fair consideration. It gives *Malla-deva*, and a grant by his elder brother *Gunaluttama* in S. Saca 800 : A. D. 877—8. I must suppose some error in the word "elder," as analogy shows it must have been *Malla-deva's* younger brother. A war is mentioned, as occurring with the *Pandiya* king ; who, though stated to be defeated, which is a little questioable, would yet have given a shock to the *Congu-nād*. Again there was a division of power, *Rāja-malla* at *Dalavan-puram*, and *Gunāluttama* at *Scanda-puram*. An interval indicated by the term "Subsequently" appears. Then follows the abrupt transition to the *Chola* conquest, by *Aditya-varma ;* who it is said came to *Congu-desam*, and conquered the wild huntsmen of the king of *Congu-desam*, and took the town of *Talicādu*, synonymous with *Dalavan-puram*. The term *Vardar** (huntsmen) is a very depreciating one. In other documents I have seen the term applied to the inhabitants of Wynaad; and the mention of a *Vardar-raja* occurs in Malayalam documents, whose locality was in that neighbourhood. It is implied that the king had no better forces than a mob of wild hunters. A weak and low state of power is indicated: and not that of one ruling Malayalam by a viceroy. *Vira-chola* is said in the Manuscript to be the son of *Aditya-varma* (a mere titular name) and *Vira-chola* recurs so perpetually that, though titular, it must have belonged pre-eminently to some one king. The book of Inscriptions,

* This word, of very common usage, I suppose to be a corruption of the Sanscrit Virata applied to a Barbarian.

to which I have referred, gives us one of the 5th year of *Vira-chola-dever*, with the corresponding *Saca* year 1044, A. D. 1121—2. Now we may hope *that* is the truth, or near the truth. The first year of *Vira-chola* then would be Saca 1039, A. D. 1116. But the last of the *Congu* kings recorded was ruling in *Saca* 800, A. D. 877—8. If we strike off 16 years for the rule of *Aditya-varma*, after his conquest, it gives A. D. 1100: two hundred years later than the period assigned by Mr. Dowson. There must have been a long interval after *Raja-malla*, and before the *Chola* conquest; and I am satisfied, in my own mind, that the writer knew not how to fill it up otherwise than by the foundation of the fane at *Seringapatam* A. D. 893—4. If we forcibly bring down the period of *Raja-malla*, or force up the era of *Vira-chola* to make a coincidence, it will be to deal with evidence in a way not admissible. Let the evidence remain; and let us see, if there be any fair *vinculum*, or connexion not forced.

In 30th No. of the M. J. Literature, &c. at p. 51 it is stated by Mr. Elliot, "an inscription at *Dharavarum* in *Rajahmundry* shows that a *Vira-chola-deva* was reigning in S. S. 1001, A. D. 1079." Mr. Dowson gives a date from Wilson's McKenzie Catalogue in which a *Vira-chola* is dated, *Saca* 899, A. D. 977.

Here there are three different dates *Saca* 899, 1001, 1039. I distrust the first one; but the medium of the three is *Saca*, $949\frac{2}{3}$ A. D. 1027. Even this medium would leave an interval of 150 years to be accounted for; and would refer the *Chola* conquest to about A. D. 1000.

It cannot I think be admitted that *Kullottunga* and *Rajendra* were the same person, as Professor Wilson is stated to suggest; nor does it seem allowable to consider *Rajendra* to be the same with *Aditya-varma*, as Mr. Dowson states there is reason to suppose. We are pretty sure of the date of *Rajendra*. *Camban* lived in his reign. According to the Manuscript entitled *Carnātaca-rajakal*, *Camban* wrote the *Ramayanam* in (that is about) Saca, 867, A. D. 884—5. Mr. Ellis, and a M. S. quoted by Mr. Dowson, give the date A. D. 886. Perhaps that date, at least, is settled. But *Kulottunga-chola* was "the ruler of Madura, and decapitator of the *Pandiyan*, and possessor of *Carur*." An inscription is dated in the 23d year, implying a long reign. There are inscriptions in his time, and that of *Rajendra* in *Carur*, and No. 6 of those before quoted, attests the *Chola* conquest of *Congu-desa*. My inference (agreeing with what I see of the manner of the primary documents) is that after the *Pandiya* king had retreat-

ed from *Congu-nād* he was attacked, defeated and beheaded, either by *Vicrama*, or by *Kullottunga;* who then governed the *Pandiya* and *Chola* kingdom, and over-ran the *Congu-desa* in its enfeebled state. He would thus unite three kingdoms. In the poem *Calingatu-parani*, *Kulottunga-chola* is described as the successful invader of *Telingana;* the fact of a *Chola* conquest, being unquestionable. He gave the *Tonda-mandalam* to his illegitimate son *Adondai*, and his legitimate son (as I presume) *Rajendra* succeeded him; ruling over the *Chola*, *Pandiya*, *Congu*, and (through *Adondai*) the *Tonda-mandalam*, and part of *Telingana*. *Vira-chola* I suppose to have remotely succeeded *Rajendra;* his power at *Rajahmundry* being unbroken in S. S. 1001. I carefully note however that the long interval A. D. 886 to A. D. 1079 (or even the medium date A. D. 1027) is altogether too long, without a succession of kings. May I cut the knot, by supposing that *Aditya-varma* "the sun jewel," is a loose epithet for the *Chola* power? The fact that the leading document does not include with the *Chola* kings the well authenticated names of *Kulottunga* and *Rajendra*, either implies that they went before, or else that they are mentioned by common Tamil names, rather than by high sounding titles.

What I consider to be nearly certain, as to the foregoing para is that *Vicrama*, or *Kulottunga*, conquered Madura and Caroor, and that *Kulottunga* successfully invaded the north country; generally designated as *Telingana;* and that he gave the *Tonda-mandalam* to his illegitimate son *Adondai*. If any thing can be proved, so much can. The *Tonda-mandalam* was bounded on the south by the *Palar;* east by the sea; north by the *Calahasti* mountains; west by the ghats, and includes *Kānchi* the capital. *Adondai* had to conquer his kingdom from the *Curumbar* and *Puralar:* the fort of the latter was the modern *Red-Hills;* which was obstinately defended. The statement, by Mr. Ellis, of "a feudatory chieftain of *Rajendra* ascending the throne of *Tonda-mandalam* in the ninth year of *Rajendra:*" would slightly tend to shake my opinion that *Kulottunga* and *Rajendra* cannot be the same person. The statement is however vague. It might apply to the successor of *Adondai;* for *Adondai* had to cut his way clear to the throne. His successor would find the throne prepared. But why do I not admit *Kulottunga* and *Rajendra* to be the same? 1st, Because the two men are described by different characters, and different actions. 2nd, Different titles are not given to the same individual, in *inscriptions*. 3rd, *Kulottunga* is

the raiser of the fortunes of his race ; *Rajendra* is an emperor who enjoys what a predecessor won. But I chiefly rest on the first reason. War, and illicit love, are the harmonizing marks of *Kulottunga.* It does not appear that he would have cared a fig for the poetic jewels of *Vicramaditya's* court, or the eight elephants of *Krishnarayar's* assembly. But *Rajendra* was a patron of poets ; *Camban, Otta Cuttan*, and, if I mistake not, *Cala Megha*, flourished under him. It is generally the received opinion that *Rajendra* was killed by a lampoon of *Camban.* He took it to heart, at all events. *Kulottunga* would have chopped it to pieces with his sword, and thrown it into the sea.

Now then I may look at the foot note at p. 18 of Mr. Dowson's Pamphlet. "Mr. Taylor has adopted the list with its errors. Taylor's M. SS. vol. 2, p. 64." For this reason simply that I had then (in the early part of 1835) nothing else to guide me, but the descriptive Catalogue ; and, though I did perceive marks of careless printing, yet to know whether a comma was misplaced or not, would have been impossible ; and the fairest mode, beyond question, was to quote just as I found the document. The M. S. since translated was not then in my possession.

At p. 19, we read " Professor Wilson suggests the possibility of *Kulottunga* and *Rajendra* being titles of the same person ; neither of these names occur in our list : but there seems reason to suppose that *Rajendra* was a title of the first prince in our list called *Vijayaraja Aditya Varma.*" I quote the passage in fairness, not having the *Des ; Catalogue* just now at hand for reference. And it seems needful in order to introduce another quotation, which perhaps had better be put in double column, along with the passage to which, after some search, I find it to refer :

The great source of the difficulty which we shall encounter in our inquiry, and in comparing our M. S. with other notices of the Chola kings arises from the indiscriminate use of names and titles. Although the Rev. Mr. Taylor questions the probability of the same king being known by more than one title, we have the authority, &c. and Mr. Taylor himself in his Analysis of the McKenzie M. S. S. thus describes one of the documents : ' Another list of *Chola* princes is given—showing three different names sometimes given to the same individual, Page 19.'

" It is certain that there must have been more than one *Viransoren ;* for while *Rajendra*, who was the patron of the celebrated Tamil poet *Camban*, is found to have reigned, A. D. 886, we have a *Vira Soren* fifth in succession from *Rajendra*, who reigned about A. D. 918. We cannot suppose, with Mr. Wilson that *Vira-Soren* and *Raja Rajendra* were the same : for though both names are *titular* we

are forbidden by the analogy of custom, as abundantly exemplified in the *Pandian* lists, to consider *titles* usually distinctive of individuals, as given to one person. We rather presume in the list of sixteen, discretionary power must have been exercised in cutting out all duplicate or triplicate names, as being supposed to be erroneous; whereas a list without such names occurring is, on that ground, exposed to suspicion of defect." *Or. Hist. M. S. S. Vol.* 2, *p.* 68.

If this quotation *in full*, did not sufficiently vindicate me, I should have had to plead in apology that my Analysis of the McKenzie M. SS. was, in the earliest part, two years, and in the latter, three years, posterior to the publication of my second volume of translated M. SS. But the apology is not necessary.

I must guard against contradicting myself; for I have stated a while ago that *Vira-chola* was not to be confounded with others; by admitting that at a later date the title may have been borne by a descendant. Indeed I ought not to be positive. *Vira-chola*, or the Champion *Chola*, being so very likely to have been a common epithet: though perhaps pre-eminently proper to one among them.

On page 20, Mr. Dowson gives part of a list in which occurs 18, *Vicrama;* 19, *Kulottunga;* 20, *Rajendra-chola;* 21, *Vira-chola* and lower down states: "We find also three of the above names in the same order in a poetical account of the actions of *Vicrama*, *Kulottunga*, and *Rajendra*, *Chola*, which shows that so far this succession was received by other *Hindu* authors." I must beg permission to plead for the distinct existence of *Vicrama*, *Kulottunga*, *Rajendra*, and *Vira-chola.*

On referring back to past and almost forgotten, lucubrations, I find from the Madura Puranam, 34th and 35th Tiruvilaiyadels, that the *Chola* king who cleared the forest for building *Kanchi* and is termed, "Forest felling *Chola*" was favourably disposed towards *Madura*, and promised to give his daughter in marriage to the *Pandiyan;* but the latter's younger brother supplanted him. The result was, war; and a severe contest, in which the *Pandiyan* was conqueror only by a miracle: the *Chola* general and king's younger brother being captured. The former was sent back, and a maintenance given to the younger brother. In the 37th Tiruvillaidel we meet with another war, in which the *Cholan* at first fled, but rallied, and the *Pandiyan* in turn retreated. Both *Pandiyan*, and *Cholan*, fell into tanks from which the former was extricated, and in which the latter perished. In the 50th Tiruvilaiyadel we have the names of both kings concerned.

Vansa Sec'hara Pandiya, and *Vicrama-chola*. By a very bold fiction the latter is said to have had as allies the Mahomedans, the Orissa, and *Vijayanagara* rulers, with their troops. Such a trifle must not be minded. But still *Vicrama-chola* was defeated. In the supplementary M. S. of my first volume, *Paracrama-chola* is said to have driven out the *Pandiyan*, by the aid of a northern ruler: the son of *Paracrama* being *Kulottunga*. Lower down *Sundara Pandiya* is said to have ruled the *Chola*, *Chera*, and *Pandiya*, kingdoms. His son released a *Chola* king from confinement, and the latter gave him his daughter to wife. At a later period a *Chola* king, in defect of male posterity, gave his daughter to the *Pandiyan* in marriage; and of two sons born in consequence, the eldest inherited the *Pandiya*, and the youngest the *Chola*, kingdom. The eldest conquered the *Malayala* country with other places, and derived tribute from them. A grandson of that Pandiyan, named *Makuda-verddhana*, engaged in war with the *Chola* king—his relation we presume—and was killed in consequence. But *his* grandson conquered the *Cholan*. His son was *Adhi-vira Pandiya* of literary repute; who maintained a close friendship with the *Cholan;* and some short time after in S. S. 1246, A. D. 1323 (*recté* 1313,) the Mahomedans became the common enemy of both.

Now though any thing like implicit credence cannot be given, nor any certainty, as to time and order, found, we may yet gather up some vestiges. It is something to fix *Adhi-viranan* towards the close of the 13th century. The feeble succession after the Mahomedan irruption down to *Chandra Sechara*, when the country passed into the hands of a viceroy from Vijanagara, is not of much consequence. In the summary which I have given, we see amicable relations interrupted by treachery, in the delicate point of intermarriage; we see war with various results. The falling into a tank is all the *Sthala-puranam* admits. The following affair was more serious: that may have been a subversion of the kingdom. In the supplementary M. S. (though of supposed defective authority) we have a more candid admission of a *Chola* conquest: *Paracrama-chola* is stated to have driven out the *Pandiyan*. Now *Vicrama-chola* of the Tiruvilaiyadel, and *Paracrama-chola* of the other Manuscript, are, as to derivative meaning very much the same. It seems to follow that *Vicrama-chola* conquered *Vansa sec'hara Pandiyan*, and *Kulottunga*, son of the latter, may only have had the honour of beheading the captive prince. Later down there is great prosperity in the

Pandiya kingdom, and intermarriages : one of them of such a kind as to render the term *Pandiya chola* perfectly accurate, as the son of a *Pandiya* king, by the daughter of a *Chola* king; and ruling over the *Chola* kingdom. Next comes a *Pandiyan* king killed by a *Chola* king, and a *Pandiyan* overcoming the *Cholan ;* and then a period of peace.

The present translated M. S. though I fear it can no more be fully confided in, than those to which I have alluded, has some similar details. We find that *Parantaca-raya* (destroyer of foreigners) fought with the *Pandiya* king ; conquered him, and took tribute : and married the daughter of *Setu-raya* (a king of *Ramiseram*). Among many children *Divi* ruled the *Chola* kingdom, and was afraid because of a *Pandiya* invasion, in which however he conquered, and cut off the *Pandiyans*' ears only. In the next succession, a *Chola* general fought against the *Pandiyan*, who fled away. The general took the *Pandiya-desa ;* and spoiled *Virinji-puram*. But, as the mother of the *Pandiya* king was a relative of the *Chola* king, the latter restored Madura to the *Pandiyan ;* only taking from the latter much wealth ; and both parties were subsequently on the most friendly terms. It may be very difficult to reconcile all these things ; but we may perceive general outlines of coincidences. I must not be chargeable with any possible self-contradiction ; at least, as wilful : for in pursuing a narrow and devious track, through a labyrinth, it is impossible to look all around, and to a great distance.

These additional remarks have proceeded to a length which I had not intended. It may be expedient to bring them to a close. The only remaining point of consequence in Mr. Dowson's Pamphlet, is the introduction of a *Chalukya* conquest in the reign of *Hari-vari* or *Raja-raja-chola.* The only point of coincidence that I can perceive is the mere occurrence of the name *Amarbhujanga*, as general of *Raja-raja-chola ;* and the mention in Mr. Elliot's valuable *Chalukya* inscriptions of a general of *Somesvara* I. who is styled the humbler of *Bhujanga : Bhujanga* is so evidently a title (implying prowess) that it need not necessarily be limited to one individual. Mr. Dowson is positive on the identity. All that our Manuscript states concerning *Bhujanga* is his conquering to the extreme west ; fixing there a pillar of victory ; depositing his spoils in a temple ; and acquiring great fame in the world. Therewith we take leave of *Bhujanga*, in so far as our Manuscript is concerned. A small chasm

occurs, as I have noted in its due place. We then have a new personage brought forward in *Bhima-raya*, without our knowing who or whence he was, or with whom he fought. But it is clear that it is this *Bhima-raya* who went against *Calinga*, and other northern countries ; while his career is described as one uniform course of conquest ; without a particle of defeat, either by the general of *Somesvara*, or any one else. Mr. Dowson seems to have been misled, by an imperfect translation, by overlooking the chasm in the narrative, and by not adverting to the introduction of another personage, in the nominative case. So that Mr. Dowson's statement, in his abstract, "*Amra* then marched into the *Calinga-desam*," is wholly unjustifiable; for it was—apparently at least—*Bhima-raya* that did so. And the reversing the statement of the Manuscript, and writing defeat for victory, merely because some* general of *Somēsvara* I. humbled some person, named *Bhujanga*, does not look like fair historical inference. There is a *vinculum* yet wanting, to connect both statements. The evidence supplied by Mr. Elliot's most valuable paper on the *Chalukyas* may remain perfectly true, and untouched: and yet we may not be possessed of a knowledge of the exact point, where it joints in with the *Chola* history.

There seems to be, by far, too great a looseness of conclusion in Mr. Dowson's statements. *Sancara-deva* is, without difficulty, identified with *Sancaracharya*, and several reigns, and a few hundred years, passed over to effect the identification. *Virenji* in the M. S. is without difficulty fixed near Vellore, making a distance of 500 miles of no consequence, compared with similarity in a name. *Amarbhujanga* occurs in the Manuscript, only as a conqueror; *therefore* it is the *Bhujanga* humbled by the *Chalukya* general. I would not be thought intentionally to bear hard on Mr. Dowson; who, if I understand matters aright, has made praiseworthy efforts to distinguish himself; but I would wish to enforce the need of a more careful induction, by the analytic process in all. Splendid examples have not been wanting to mislead. Sir W. Jones and his imitators, and even Professor Wilson, cannot be held exempt from the charge of synthetic constructions, on very insufficient premises. I adhere to the remark long ago made by me; which is that we want as yet, a much wider basis of translations—accurately, literally, faithfully, made. Till such a basis can be had,

* Compare p. 25, vol. 9, M. Journal Lit. and Science.

detached evidences may be pointed out, as such; but avoiding a drawing such conclusions as violate the proprieties of time, place, and true inference from evidence afforded.

In the present instance, it is quite clear that *Chola-rajas* made extensive conquests or incursions northwards, and it is equally clear that at some period, a reaction by the *Jaina Chalukyas* was provoked, and the *Chola* invaders defeated.* So much, I submit, is all that we at present know on the subject.

As regards the *Oyisalas*, the paper of Mr. Elliot, referred to, contains some matter that may aid in any future full statement concerning that dynasty. I observe that Mr. Elliot has given a derivation of the word, different from that suggested by the Manuscript. I must not therefore insist on my own conjecture as to *Visala*, though a *Jaina* title not unknown to the north. In quoting some inscriptions from the neighbourhood of *Dharapuram*, in a former page, I was struck with a string of titles of northern kind, ending with the word *Bhosala ;* so common among the *Mahrattas*. It is merely a conjecture, whether *Visala*, *Vijala*, *Hoisala*, *Poisala*, and *Bhosala*, are not all originally one title, dialectically varied.

It is not my intention to prolong annotations on either that, or the *Raya*, dynasty†. It might be desirable to fix the era of *Peddata* or (according to his Brahmanical title) *Vishnu-verddhana.* That may be done perhaps by inscriptions not known to me. But the era of *Ramanujacharya* is the same thing. Colonel Wilks gives to the latter the date of 1133, that is, I suppose, *S. Saca*, 1055. The *Carnataca-rajakal* gives to *Ramanuja* the date *S. Saca*, 939. Mr. Elliot regards *Vishnu-verddhana* as a cotemporary of *Vicrama-chalukya* 2d, whom he places in *S. Saca*, 998 to 1049. Our M. S. gives the *Saca* year 1015 for the birth of *Vishnu-verddhana*, and grants are specified in S. S. 1021, 1039, 1044, 1050, 1053. The close of the eleventh century of the Christian era, may therefore be fixed as that period in which he flourished. Up to that date we may ascend by dates tolerably well fixed; and higher up still as far as *Rajendra-chola.* But previous to this last, it is my present opinion, that dates are uncertain. There were powerful *Chalukyas*, *Ganapatis*, *Cholas*, *Pandiyas*, and *Cheras*, in existence antecedently ; the chronology of whom I suppose to be not yet exactly determined.

* See Madras Journal Literature and Science, vol. 7, p. 201—206.
† At Vijayanagaram.

II. *On the Customs of Gosawees or Gosaeens.* *By* John Warden, Esq., Bo. C. S.

Their Origin. 1. A *Gosawee*, as may be discovered from the appellation, which is a compound of the Sunskrit word गो (*Go*) passion, and स्वामी (*Swamee*) Master, was originally a person who, in honor of God and for the benefit of his own soul, had so completely mastered his passions, as to be able to devote his whole life to the exercise of the strictest devotion and most rigid austerities.

2. The founder of the sect, according to the traditions of the *Gosawees* themselves, was *Sunkur Achary*, whose principal disciples are the Brahmins of the *Siw* order. The *Gosawees* accordingly worship that deity in the shape of the *Lingum;* as the *Byragees*, the other kind of Indian devotees, do *Vishnoo*, in his incarnation of *Ram*. *Sunkur Acharya*, in his *Gosawee* character, nominated four *Chelas* or disciples named, 1st, *Neera Troteeka Achary;* 2d, *Shringee Rushee Pritvee Oodha Achary;* 3d, *Dhurmbootee Swuroop Achary;* 4th, *Pudum Achary*.

3. *Neera Troteeka* then chose three disciples immediately subordinate to himself, viz. *Geeree, Sagur*, and *Purwut; Shringee Rushee Pritvee Oodha Achary* had also three followers, named *Pooree, Suraswutee*, and *Bharuttee; Dhumbootee Swuroop* and *Pudma* had only two followers each, the names of those of the former were *Teert* and *Asrun;* and of the latter *Bun* and *Urrun*.

4. The four disciples of *Sunkur Achary* provided for the performance of the discipline they had imposed upon themselves by the establishment of four *Mut'hs* or temples in four different quarters. The first was situated in the north, the second in the south, the third in the west, and the fourth, viz., that of *Pudum Achary*, in the east.

5. These establishments are said to have been afterwards subdivided, and the fraternity then consisted, as it does at the present time, of ten different sects composed of the followers of the above mentioned ten persons appointed to be disciples to the four *Gosawees* who established their *Mut'hs* in the four different quarters: each sect bears the name of the person of whose followers it professes to be composed; thus, there is the *Sagur* sect, the *Purwut* sect, the *Pooree* sect, and so on. The whole are equal in rank, one having no objection to eat with the other. In the early periods of the institution of

the order, *Gosawees* supported themselves by the alms they received from good men.

6. In process of time the fraternity became less distinguished for their devotion than their ancestors, and some of the disciples commenced trading or followed the profession of Arms ; while others, wandering still further from the road they professed to follow, formed matrimonial connections, and became in every respect as worldly as their neighbours. The latter in consequence are not acknowledged as brethren at all, except in the *Dukhun.**

7. Those *Gosawees* who still adhere to the ancient land marks of their order are called *Dundee* or pilgrims (literally mendicants who carry a staff) : the traders are distinguished by the name of *Dunglee*, and the married *Gosawees* are called *Ghurbaree Gosawees :* as the latter no longer profess to be guided by the original laws of their order, they will be spoken of separately.

Dwellings. 8. All *Gosawees* live in buildings called *Mut'hs* or Temples, those especially devoted to purposes of worship are called *Purrumpuragut Mut'hs*, or ancient temples descending from generation to generation ; the others are simple dwellings.

Laws. 9. The written laws by which *Gosawees* are professedly guided are the *Dhurm* and *Munoo Shasturs :* all questions however relating to the internal administration and discipline of the order are decided by an assembly called the *Dusname*, which should consist of the disciples of the ten founders from whom they take their names; but as in some places members of each sect are not to be found, as many as there may happen to be, are authorized to meet, their decisions being as irrevocable as those of a perfect assembly. From the *Dusname* there is no appeal. In the event of a difference of opinion occurring among the members of the assembly, it is usual to convene a grand meeting of the residents in the surrounding country, whose opinion decides the point at issue, provided it has not in the meantime been settled, as it is very desirable in all cases that it should be, by the original referees.

10. The laws of the fraternity are said to be most correctly ex-

* To compensate the good *Gosawee* for the fallen state of these apostates, some are still found to be sufficiently devout to deserve the name of *Purrumhonsh* or "the most devout of all Devotees." The hearts of these men are said to be as unspotted as the feathers of the sacred *Honsh* whose name they bear, and their mind so unceasingly abstracted in the contemplation of the deity as to be able to raise their bodies from the earth into the air.

pounded at *Benares*, *Jhansee*, and *Hyderabad*, and least so at *Poona*, the mal-administration, for several years under the Mahratta Government, of the empire of which this was the capital, having it is said induced a relaxation of principle on the part of the *Gosawees*, and occasionally actuated the *Dusname* to give opinions at variance with those of the same assembly at other places, although the customs and privileges of the order are avowedly similar in all parts of India where the members of it are to be found.

Mohunt. 11. If any member of a *Mut'h* be particularly distinguished by his acts of hospitality, veneration for his ancestors, and a life of morality, he receives from the *Dusname* the honorary title of *Mohunt*. This distinction is not to be purchased at any other price, neither riches nor length of years giving any claim to it, if unaccompanied by the qualities mentioned. There can only be one *Mohunt* in a *Mut'h*, and his authority does not extend beyond the limits of his own establishment. The *Dusname* being absolute, may at any time deprive the *Mohunt* of his honorary degree, if he shall appear to the assembly to have ceased to deserve it. It is generally conferred upon the *Gooroos* of *Mut'hs*, who are the abbots of the *Purrumpuragut Mut'hs* or the monasteries, and supreme members of *Mut'hs* used as dwellings.

Gooroo. 12. Every *Gosawee* calls the person who chose him for his disciple his *Gooroo** or spiritual master; of these *Gooroos* there may be many in one *Mut'h* whose respective *Cheelas* or disciples are subordinate to them, while they as well as their disciples are subject to the authority of the head of the establishment who is called the *Gooroo* of the *Mut'h*. This person has considerable power over his disciples, having the whole internal administration of the establishment. He can expel any disciple who may be found guilty of misappropriating the common property, of gambling, of drunkenness, of fornication, or contempt of his authority. If his orders be disobeyed they are enforced by the assembly of the *Dusname*, which has appellate jurisdiction in all such cases.

13. If on the other hand the *Gooroo* establish any bye-laws for his *Mut'h* subversive of the fundamental principles of the order, he may be dismissed by the authority of the *Dusname*, which will nominate his successor from among his disciples, or leave it to their discretion to select the fittest member for the situation.

* It may here be observed that whatever is said of the powers of the *Gooroo* of a *Mut'h* applies also to the authority of any *Gosawee* who has pupils or disciples of his own in so far as under such circumstances he can exercise it.

14. The *Gooroo* is empowered to advance the public money of the establishment to the most intelligent of his disciples for purposes of trade; during their absence on such expeditions they are independent of the *Gooroo*, but the moment they return they again become subordinate to him, and must deliver over their profits to him to dispose of for the public benefit in such manner as he may deem most proper.

15. The *Gooroo* is bound to support any of his disciples who, after separating their interests from those of the establishment, come to want; upon the same principle every *Gosawee* is bound to support the disciple of his choice, whether alienated from him or not, whenever he may stand in need of assistance.

16. When a *Gooroo* is too old to continue his duties, or from other causes becomes unfit for his situation, the most intelligent of his disciples is selected in his stead; should any discussion arise as to his successor, the point is decided by the *Dusname*.

17. The establishment of a *Mut'h* may consist of any number; the most devout, intelligent, and conciliatory member is generally appointed *Gooroo*, and each may introduce as many of his own peculiar disciples as the capital of the *Mut'h* can support.

18. When the *Gooroo* finds his death approaching, he names the disciple whom he wishes to succeed him and who must be appointed accordingly. The nomination on the part of the *Gooroo* may be either by word or in writing; though in the former case the fact should be witnessed by some of the members of a foreign *Mut'h*.

19. If the *Gooroo* die suddenly without having appointed a successor, his disciples select one of their own body to preside over them; should they differ as to the most proper person to be nominated, the question is adjusted by a Decree of the *Dusname*, which is final. During the consideration of the question by this assembly, the *Mut'h* and all the property of its establishment are taken possession of by the *Dusnames* who provide for the due administration of its affairs until the successor to the chiefship is nominated.

Chelas or Disciples. 20. The duty of a *Chela* or disciple may be said to be a passive submission to the will and caprice of his *Gooroo*, who is in the place of his father, and to whom he is in respect to support, protection and inheritance, as a son; so much indeed does this principle appear to prevail among *Gosawees*, that, in speaking of the *Gooroo* of the person to whom they are disciples, they call him grandfather *Gooroo*, in the same manner they speak of a grandson

and great-grandson disciple. The disciple may be alienated by his *Gooroo* and deprived of his inheritance; this is done by the *Gooroo* giving him such portion of his property as he pleases, taking a deed of separation from him, and appointing by a witnessed writing or by word, in the presence of three or four respectable brethren, another person his heir.

Gosawunees or Female *Gosawees.*

21. *Gosawees* being professedly unmindful of distinction of sex, admit females into their community, the form of initiation being the same as that for the males. Female children, however, are never selected or purchased as disciples, it being necessary to their admission, that they should have arrived at years of discretion.

22. Those *Gosawee* devotees whose desire it is to be considered free from every natural feeling or prejudice prevailing in this world, appear publicly in a state of perfect nakedness; their bodies, which are defiled by filth and ashes, are, they say, to them as statues, no longer susceptible of any excitement that is not created by the contemplation and adoration of the deity, which engrosses their whole mind and leaves not a thought for this world. The less devout, but less ostentatious and indecent class, bind a cloth round the waist, and the generality of *Gosawees* wear as much clothing as other men; the texture of their apparel is coarse and the colour a dingy red, they sometimes allow their hair to be sufficiently long and matted to be twisted round their heads, something in the shape of a turban.

Costume.

23. The *Gosawunees* unite in their persons, in token of the perfect oblivion of sex, the costume of both male and female, they wear the turban, the *Ungar* or long robe reaching from the neck to the knees, and the *Dhotee.*

24. In Hindoostan Proper, persons of the *Brahmin*, *Kshutree*, and *Wysh* castes, can alone be introduced among *Gosawees* and initiated into their orders; in the more southern countries of India the members of the *Soodra* caste are also admitted.

25. Candidates may be of any age, some are admitted gratuitously, others in consideration of the payment of money, and during periods of famine, many sell themselves to *Gosawees* for personal support.

26. The candidate is received with the consent of the *Gooroo* and *Chelas* of the establishment to which he is to be attached on the one side, and that of his own parents or nearest relatives on the other.

27. His head is first shaved when he immediately becomes a *Gosawee* in a state of probation; after remaining so a year or two and making himself familiar with the usages of the order, the ceremony of *Beeja Hom* (a sacrifice to fire) is celebrated, when he becomes a perfect *Gosawee.* If a person of too inferior caste to have been admitted into the fraternity has through inadvertence been regularly initiated and eaten with the brethren, he is branded with a hot coin, deprived of the clothes that may have been given to him, and ejected from the *Mut'h.* The *Gooroo* who admitted him will then go before the *Dusname* in the attitude of submission, and pray for mercy and pardon at its hands; which, if granted, restores the *Gooroo* and his establishment to their former rank, and if denied leaves them equally outcasts with the person who deceived them.

28. During the noviciate of the candidate his parents are at liberty to withdraw their child and any contribution they may have given; but after the solemnization of *Beeja Hom*, he is irrevocably attached to the *Gosawee* sect, and as much alienated from his family by birth as if he had never belonged to it, not even performing *Sootuk* or mourning upon the death of its members.

29. The natural child of a *Gosawee*, if born of a *Brahmin*, *Wysh*, or *Soodra* woman, has rank and rights equal to those of a *Chela* or disciple, after he shall have been initiated in the usual way; the only peculiarity being that the ceremony cannot be performed by the father; the uncle or next nearest relative should officiate.

Discipline.

30. The discipline of the order is either severe or relaxed, as the *Gooroo* of a *Mut'h* or the majority of the *Dusname* are of harsh or mild dispositions. The crimes however for which a member should be ejected from the fraternity are specified; they are, taking away the life of a cow, a Brahmin, a woman, a *Gooroo*, or a child; and for having had sexual intercourse with other than a Hindoo woman. The punishment is ordered by the *Gooroo*, or the *Dusname.* If such criminals throw themselves on the mercy of their brethren, their punishment is occasionally commuted to fine and penance; such indulgence is never allowed to *Gosawunees*, who are always expelled for serious offences.

Sale and Mortgage of *Mut'hs.*

31. The *Purrumpuragut Mut'hs*, which appear to be as much consecrated and devoted to worship as any other Hindoo Temples, cannot be sold or mortgaged for any purpose whatever. If any are so surreptitiously, the offender is ejected from the *Mut'h*, and the sum for which it was sold or mortgaged

paid to the buyer or mortgagee by the *Gooroo* and his disciples. The same plan is adopted in cases of illegal mortgages or sales of the other kind of *Mut'hs.* Such sanctity avowedly not considered to attach to the *Mut'hs* which are the dwellings of the *Dunglee* or merchant sect of *Gosawees;* the right however even in respect to them is limited to the *Gooroo,* he may sell or mortgage the *Mut'h* in which he presides, and his act is confirmed by the disciples, who generally redeem it. It is not usual to divide the property in a *Mut'h* and sell the building after having once made common stock. If from any cause such arrangement be made, the *Gooroo* takes to himself what portion he pleases, and decides the amount to be allotted to each of his subordinates. If any disciple wish to separate his interests from those of the rest, he receives such share of the whole property as the *Gooroo* may please to give him, and a deed of partition is taken from him.

32. The right of government to distrain *Mut'hs* used as dwelling houses for the payment of the debts of the *Gooroo,* after having referred the subject without effect to the *Dusname,* is admitted. This assembly however generally manages to adjust the matter without requiring a recourse to such an extreme measure. A *Mut'h* not being supposed to consist of shares, the distraint of it for the payment of debts due by other members of the establishment than the *Gooroo* is considered as unjust as the sale or mortgage of it by one of the disciples in liquidation of his own debts. Such sales or mortgages are always recognized, in so far that the purchaser or mortgagee is not allowed to lose by the fraud of the seller or mortgager, who is punished for such acts by his *Gooroo* or the *Dusname.*

Of Land attached to *Mut'hs.*

33. Land is bought from *Enamdars* when it is found necessary to build a *Mut'h;* by this arrangement the Government has no right in the land; if it be charged with a *Joree* or quit-rent, a permanent remission of it is solicited from, and in general granted by Government, or the amount of the right of Government is paid as part of the price, and the annual charge defrayed by the *Enamdar* himself; should land however, after the completion of the *Mut'h,* be saddled with a tax, the establishment pays it.

34. It is usual to allow the public to partake of the water of a river, well or tank within the limits of a *Mut'h* for bathing, cooking, and drinking, but they are not permitted to erect a *mote* (the usual

machinery for drawing water from wells) or to apply the water to purposes of agriculture.

35. Treasure found in the land of a *Mut'h* is considered the property of the finder, no inquiry as to the owner being made.

Division of property.

36. A division of property and interest sometimes takes place between *Chela* and *Gooroo;* the only tie which in that case remains between them is that each supports the other when in distress; the riches acquired by them under such circumstances, belong in virtue of the partition exclusively to him who earns them, the *Chela* having only a very remote interest in the wealth of his *Gooroo*, depending upon the contingency of his dying without other disciples or not having named an heir in the prescribed form.

37. The alienated *Chela* is not responsible for the debts of his late *Gooroo* whether incurred before or after the alienation.

38. If an alienated disciple die leaving no disciples of his own, his *Gooroo* takes his property, pays the expenses of his funeral, and settles debts in communication with the *Dusname;* if the deceased leave no property, the *Gooroo* is not responsible for his debts, but must pay the expenses of his funeral; if the *Gooroo* of the alienated *Chela* who may die in these reduced circumstances be also dead, the *Gooroo's* heirs are bound to do what would have been his duty.

39. If a *Gooroo* proceed upon his travels and no one hear of him for 10 or 15 years, the person who would succeed in the event of his death (that is one of his disciples) performs the ceremonies observed on the death of a relation, which consist of assuming the appearance and performing the ceremonies of mourning and entertaining the fraternity in the name of the deceased. The *Gosawees* differ from most other Hindoos in burying their dead instead of burning them. This probably originated in the *Brahmin* custom of burying their *Sunyasees* or devotees.

40. If a *Gosawee* die very poor leaving one or more rich disciples in a state of alienation, the *Dusname* obliges him or them to bear the expenses induced by that event. If a *Gosawee* die in indigent circumstances, and have no disciples of any kind, the *Dusname* perform the last ceremonies due to him on earth.

41. One-fourth of a *Gosawee's* fortune is devoted to ceremonies consequent to his death, and another quarter to the erection of a suitable tomb over his remains.

Ghurbaree Gosawees.

42. Upon perusing the information that I have collected regarding this class of dissenters from the fraternity of *Gosawees*, I find that it relates only to the peculiarities of the Institution of Marriage, the existence of which among them forms the grand distinction between their fundamental laws and those of the rest of their brethren ; and that the greater portion of what is said upon this subject even, has been anticipated in the replies to queries relating to marriage among Hindoos in general, which were furnished by me in the Southern Mahratta Country, and have been already embodied in the Report upon Hindoo Law by Mr. Steele.

43. The following are the points in which the Institution, as it exists among *Gosawees*, differs from the laws of marriage among other Hindoos.

44. A *Gosawee* is not permitted to marry other than a *Gosawunee ;* if he do so, his marriage is not annulled, but his wife is not acknowledged as a *Gosawunee*. The *Gosawunees* must marry before they reach their fifteenth year, failing to do so (unless they can give a satisfactory reason for the omission) they are obliged to pass their lives in continency; loss of caste being held out as the punishment inflicted upon her who may be found to have lost command over her passions. These maidens have not the privilege of becoming disciples, as females of other Hindoo castes may, but must pass their lives with their parents or nearest relations.

45. A female of any Hindoo caste who is initiated as a disciple is not allowed to marry.

46. A man of the *Geeree* sect (one of the ten sects of *Gosawees* already enumerated) cannot marry a woman of his own sect but may select a wife from any of the remaining nine ; should a person inadvertently commit this irregularity, his wife must eat separately from her husband and his family.

47. A *Brahmin Bhut** performs the marriage ceremonies.

48. A marriage can be annulled on account of impotency alone. If a woman arrive at the age of puberty and hear no tidings of the approach of an absent husband, she enters into a left hand-

* i. e. A *Vaidek* Bramin of the *Saiva* sect.

ed connection *(Pát)* with another man, who however is obliged to give her up if required by the husband, and is reimbursed in the amount of his expenses. If, on the other hand, the husband decline taking his wife, he is reimbursed and she is no longer his wife; the husband, though he may take his wife, is not obliged to support her illegitimate offspring. The *pát* is not allowed to widows.

49. If a man separate from his wife and give her a *Ch'hor Chittee* or Deed of Divorce, they can never reunite. If no such paper be given at the time of separation, he may take her back. Adultery on the part of a *Gosawunee* is followed by expulsion from the order if committed with other than one of the brethren. The wife who has received a Deed of Divorce may form a *pát* connection; she who has not is not at liberty to make such contract without her husband's permission.

50. The assembly of the *Dusname* exists upon exactly the same principles among the *Ghurbaree* as among other *Gosawees;* as however the former are divided into families consisting of man and wife with their offspring and collateral relatives, there is of course no such person as the *Gooroo* of the *Mut'h.*

51. The above information, as far as it goes, may I think be considered correct; it was obtained by referring queries to the Pilgrims, who last year visited the source of the *Godaveree* at *Trimbuk* near *Nassick.* They at first received the proposal to disclose the laws of their order to the public authorities with the greatest hauteur; when however it was explained to them, that the measure was only adopted to enable Government to decide upon Civil Suits in which their brethren were parties, they relented and cheerfully imparted what was solicited. As therefore the motive for giving the information at all was to benefit themselves, it is not likely that they have practised deceit to the prejudice of their own rights; several thousand *Gosawees* of the first rank from all parts of India attended the *Yatra,* and each had access, to, and ascertained the accuracy of the information given by another. The same question was frequently put in two or three different shapes, and an air of consistency pervades the whole, which could not perhaps have been effected by falsehood; even if it had been an object to have kept us in ignorance.

III. *The Antiquities of the Neilgherry Hills, including an Inquiry into the Descent of the Thautawars or Todars. By Captain* H. Congreve.

Chapter 1st.

Scarcely inferior to the interest bestowed upon the discovery of a Phænician inscription on a stone on the east coast of South America, or the discovery of the New Continent by the Norsemen long anterior to the voyage of Columbus, has been that excited in India in the efforts made to unravel the mystery which envelopes the origin of that remarkable race of men on the Neilgherries called the Thautawars.

Many conjectures have been hazarded relative to their descent; some fancying they were derived from an Arab stock, others that Roman adventurers were their ancestors, while a third party has not hesitated to express its conviction that these people were a portion of the lost Hebrew tribes.

Unless the arguments entertained in support of such theories be advanced as weapons to destroy the stability of my own opinions on the subject, I shall probably take no occasion to refer to them.

The Thautawars are an inoffensive pastoral race, whose life like that of their ancestors is somewhat nomadic, being spent in roaming from one place to another on their mountains, according to seasons and circumstances.

Wholly differing in religion, character, usages, appearance, language, in short in every respect from the Hindoos around them, they are regarded by the Burghers of the Hills with a mixture of admiration and respect bordering on veneration; at the same time, they excite in us a degree of curiosity and surprise prompting us to wonder whence they came, as well as to which of the great families of the human race their ancestors belonged.

History informs us that irruptions of the ancient Scythians frequently took place upon the countries of the South of Asia, in the course of which they penetrated as far as India.

It is possible that a remnant of one of the Scythian tribes, driven from place to place by the hostility of the inhabitants of the country they invaded, at length found shelter and tranquillity in the mountain fastnesses of the Neilgherries; a region probably more resembling in

climate and altitude the steppes of their own country, than any other in India, and in which their posterity may have since continued, or the Thautawars of Scythian descent, were the aborigines of the plains prior to the Hindoo invasion before which they fled to the mountains.

In the sequel I shall produce strong and numerous proofs to this hypothesis of their descent, until when I request the impartial and critical reader to suspend his judgment; confident that I shall be able to establish satisfactorily the fact that a relationship subsisted between the Thautawars and the Scythians of Europe and Asia.

In opening the subject, I request the reader's attention to the Thautawar Tumuli and Cairns, which are scattered in different places over the surface of the Hills.

Some of these consist of a circular wall four or five feet high and three feet thick, made of unhewn stones piled loosely upon each other, and forming a circle about eight feet in diameter.

In addition to these I have observed double rings of stones one within the other, of different dimensions.

One of these antiquities has powerfully arrested my attention, and I intend shortly to open it.

These rings are precisely similar to those of the Scythians; the best and most convenient examples of which I can select, are the ones which belonged to the Britons or Celtic Scythians, and to the Danes or Scandinavian Scythians, found in our own country.

Our great historian Camden, in his Britannia, mentions a famous monument in Denbighshire of a circle of great stones. In Montgomeryshire he likewise tells us there is a high mountain called Corudon, on which a famous monument of great stones stands circularly. At Biscawaum in Cornwall are 21 great stones in a circle.

From the same authority I learn that at Hocksnorton in Oxfordshire, 36 stones called the Rollrich stones are arranged in a circle.

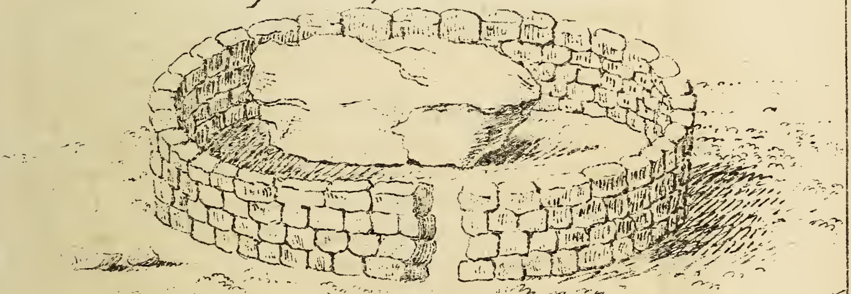
Stonehenge on Salisbury plain consists of a double ring of stones. On Sevenbarrow's Hill, four miles west of Marlebarrow (Marlborough) are 40 stones lying in a large circle enclosing an inner circle of 16 stones, near the Sevenbarrows; and at Stanton, six miles south of Bristol, 8 stones used to stand in a ring.

But if a degree of interest has been excited by the foregoing comparisons of the cemeteries of the Thautawars and Scythians, it will be surpassed when we investigate their respective contents.

Mr. Hough, in his "Letters on the Neilgherries," says "a few of "them have been opened. In one were found several iron heads of

Open Temple

Open Temple and Altar



Consecrated rock used as an Altar probably, or sacred Mount.

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" spears about four inches long, very well finished and in a perfect " state, but they began to corrode very soon after exposure to the " air. The same barrow contained one small *bell* entire and the " broken fragments of another." Besides these articles, some cloth and a kind of knife were found.

Hearne who is justly ranked with Leland, Ashmole, and Anthony-a-Wood, as an eminent antiquary, tells us that on one of the stone monuments at Stanton being opened, it was found to contain a spear and a large *bell* with a screw at the end of it.

Douglas, in his Nenia Britannica, recording the opening of the barrows in Greenwich Park, states that amongst other articles found in them were spear heads, iron knives, and some cloth.

The resemblance thus shown to subsist between the Thautawars and Scythian barrows and their contents, is too striking to be the result of accident.

The fact of so unusual an article of grave furniture as *a bell* being found in both cases, is very singular.

I might mention in support of my supposition regarding the origin of the Thautawars, that Abulgazi in his History of the Tartars says, the Scythians under one of their most early Emperors conquered the Northern regions of Hindustan.

From Scythia sprung the three great people who overran Europe: the Slavonic tribes, the Goths or Germans, and the Celts. Although differing in the sequel in religion and habits, their institutions were originally the same, and hence my comparisons will be fair.

The Parthians, governed for a time by the celebrated Arsacidæ, and whose territories laid between Media and India, were a Celtic tribe. The proximity of a people of Celtic origin to the Indian Peninsula lends much countenance to my views.

On the evening of the 11th September, 1844, I opened a cairn on the summit of a hill near Ootacamund.

A double ring of stones, standing up like tombstones, comprehended the exterior of the cemetery; the inner ring was about 4½ feet in diameter, and its stones were very close to those of the outer.

A slab which appeared above ground in the middle of the enclosure being removed, two oblong stones lying at right angles to it were reached, which on being taken up discovered a bed of black mould. Digging about a foot and a half through this, I found three round vessels 7 inches in diameter, embedded in the soil and containing burnt human bones, black mould, and some charcoal.

Shortly afterwards I came to a smaller vessel and the fragments of one of the same kind.

The first I removed entire ; it was two inches in diameter, two high, and one and a half across the neck. A cover with a cavity on the top of it being removed from the aperture of this small vessel, discovered a quantity of mould, and some very small unburnt bones inside. When I attempted to take the contents out of this vessel it fell to pieces.

I conjecture that these were the remains of children.

The appearance of the relics does not denote that they belonged to a time far distant from the present.

Anterior to the arrival of our countrymen on the Neilgherries, infanticide prevailed amongst the Thautawars, and Mr. Hough says no inducements could persuade these people to declare the manner in which the children were put to death, or show how their bodies were disposed of after the perpetration of the act that had deprived them of life.

Revolving this circumstance in my mind, and considering the fact of the vessel containing the unburnt bones of infants being found in the same cemetery, with the burnt bones of grown persons, I cannot dismiss the idea, reluctant as I may be to entertain it that the former were destroyed at the funerals of the latter, a barbarous right that would agree with the Scythian practice of immolating females on similar occasions. A more appropriate place than the present could not occur to draw a comparison between the obsequies of the Scythians and those of the Thautawars.

I shall select only such portions of these ceremonies as subserve to maintain the identity, not tiring the readers' patience with lengthy descriptions of the whole of the rites.

Herodotus, in Melpomēne, recounting the funeral of a Scythian king, states, that after the body has been transported through the different provinces of the kingdom, it is placed in state on a couch set round with spears. His concubines are then sacrificed, and a mound of earth is raised over the remains of the king and his women. The following year a number of mares are sacrificed to the deceased.

Between the foregoing account and what follows, relating to the obsequies of the Thautawars, a striking similarity will be seen to prevail.

At the expiration of some months, and sometimes of a year after

his death, the remains of the deceased are collected, a great company assembles, and a number of female buffaloes are slaughtered. I ought to mention also that amongst the Scythians, gold, silver-arms, and utensils were buried with the human remains, which is the case also amongst the Thautawars, who with the remains of their dead inter gold or silver coins, according to the circumstances of their families, along with a bow and arrows, bamboo-cups, variously shaped gourds, and the axe of the deceased.

M. D'Ancarville in his Preface to Recherches sur L'origine des Arts, &c. felt so satisfied of the identity of the Scythian religion and that of the ancient Druids of Britain, that he bestowed upon both the common appellation of Scythicism.

Keysler in his Antiquitates Septentrionales, informs us that the Scythians celebrated the ceremonies of their religion under *Groves* of great extent and of the profoundest gloom. Harkness observes that the Priest of the Thautawars, after throwing off all his worldly affections, proceeds to some forest, dives into its darkest parts, and seeks out a spot untrodden by human feet, in the vicinity of a pure stream unpolluted by human touch; where divesting himself of all worldly thoughts he dedicates the whole of his time to the contemplation of the deity.

There are five of these sacred groves in different parts on the Neilgherries.

Whoever remembers the accounts of the customs of our ancient Druids will at once be struck, on reading the following extract from Mr. Hough, with the resemblance of those of the Thautawar Priests to them.

"From time immemorial, it has been customary for two of the men "to dedicate themselves to the priestly office.

"They are called Terriara, and sometimes Pollon; are exempt "from labour, and live in a state of celibacy and solitude.

"They hold very little intercourse with the rest of the people, "except to give them advice when consulted by them upon their "temporal affairs; on which occasions they cause them to stand at a "respectful distance.

"Occasionally also they pay them an eleemosynary visit. Their "offices are few, and they do little more than preside at the annual "ceremonies performed in honor of the dead, when a burnt offering of "a fatted lamb, milk, ghee, and fruit, is presented to the manes of the "deceased.

"They go almost naked, and subsist on the produce of several
"buffaloes.

"Like the priests of Budhu, they may relinquish the sacerdotal "office at their pleasure, and resume secular occupations, but are re-"quired to select a successor to undertake their priestly functions."

Diodorus Siculus, Book 2nd, chapter 3rd, speaking of Britain, says—"They say that Latona was born here, and therefore that they "worship Apollo above all other gods; and because they are daily "saying songs in praise of this god, and ascribing to him the highest "honors, they say that these inhabitants demean themselves, as if "they were Apollo's Priests, who has there a stately grove, and re-"nowned temple of a round form beautified with many rich gifts.

"That there is a city likewise consecrated to this god, whose ci-"tizens are most of them harpers, who playing on the harp, chant "sacred hymns to Apollo in the temple, setting forth his glorious "acts."

Thus Apollo is shown to be the god of the Druids who were of Scythian descent.

Half way down the north side of Dodabett where the configuration of the mountain changes from a steep declivity into gentle hills and ridges having terraced surfaces, lies one of those temples which so closely connect the Scythian ancestors of the Thautawars with the ancient Britons.

It stands on an eminence projecting abruptly from that part of the mountain most thickly covered with primeval groves and woods through which clumps of rocks rear their head, and girt on three sides by running streams, one of which washes the base of a conspicuous and elevated rock near at hand.

The view from this point is most striking. Below to the northward the eye ranges over an extensive landscape embracing the margin of the Neilgherries and the low country of Mysore beyond.

In the opposite direction and behind the consecrated spot rises the mountain of Dodabett, its sides diversified by ravines along which water constantly descends, and by groves of ancient trees covered with a hoary mantle of moss.

High and picturesque ridges emanating from the mountain confine the view to the east and west. A scene more calculated to realize what I had read of the spots selected by the Druids for the exercise of their religion I have never met with. It brings back most vividly

recollections of the scenes in Anglesea and North Wales, districts in which those priests generally chose to celebrate the mysteries of their religion accompanied by no other sound than the murmuring of the sacred brook or the wind rustling the foliage of the groves that grew beside it.

The temple consists of a double ring of stones, the diameter of the inner being about 15 paces, while the space between the rings measures a yard, these stones are arranged within a few inches of each other and with few exceptions do not touch; they average from three feet to a foot and a half in height. Guarded by two large monolithes and two old trees which cast a shade across it, the entrance is on the south side. On the eastern side of the area I observed a smaller circle of stones. At first I apprehended the place was a cemetery from its resemblance to the cairns and rings before spoken of, further examination and removals of the surface did not confirm this view, but left me impressed with the conviction of its once having been a place of worship, the inner circle having been the *adytum*. A short distance below this temple occurs a cemetery enclosed by a double ring of stones in which I found some remains of vessels made of pottery. The foregoing account in connection with what I have already said regarding the sacred groves of the Thautawars I now compare with what follows about the Druidical groves and temples taken from Sinclair's statistical account of Scotland.

" As far as can be gathered from the vestiges of such of these " sacred enclosures as remain least defaced, they seem in their per- " fect state to have generally consisted of the circular row or double " row of stones in the central open space (the proper *lucus* or place " of light) and beyond these, of a wood surrounded by a ditch and a " mound. A holy fountain or rivulet appears also to have usually " watered the grove. Near to the temple frequently rose a sacred " mount from which it is conjectured the priests were wônt to ad- " dress the people."

Returning now to the subject of the cairns I have here to observe that contrary to my views an opinion has been advanced to the effect that these tumuli were not constructed by the ancestors of the Thautawars, but, it would hardly be fair to persist in this opinion on so slender a ground as the alleged word of a people who have not only lost all recollection of the history of these cairns but have actually suffered every tradition of their own origin to sink into

oblivion. " Though the Thautawars" says Mr. Hough, " declare " that they know nothing about them, I nevertheless think it not " unlikely that they contain the ashes of their ancestors." The " cir- " cumstances" he continues, " of their having lost all recollection of " the fact may be easily accounted for; indeed, might be expected, " when it is remembered what the Native traditions state, that the " race was almost exterminated by the Polygars upwards of 400 years " ago."

Moreover it has been urged that it is impossible to prove these cairns belonged to the ancient Thautawars; I think as yet, it is impossible to prove that they did not belong to them, and only request the attention of the unprejudiced reader to a comparison of the arguments on both sides.

In favour of the tumuli not having belonged to the early Thautawar race is the simple statement of the present people being said to know nothing about them, an obstacle, *if true*, already surmounted, while on the other hand I offer the subjoined strong evidence.

1st. The shape of the cairns: a circle of stones similar to that of the cemetries of the Thautawars at this day.

2nd. The basins and other utensils, knives, arrow-heads, shreds of cloth, mingled with charcoal and bones found in the cairns are precisely the same articles buried at the funeral of a modern Thautawar.

3rd. In both cases these things are deposited in holes under large slabs in the middle of the cemetries.

4th. The numerous figures of buffaloes, some with bells round their necks, made of pottery, found in the cairns are monuments of the antiquity of the Thautawar custom of sacrificing buffaloes decorated with bells at funerals.

5th. In every case I have observed a Thautawar village situated contiguously to the cairn, manifesting some connection.

6th. The Thautawars claim to be the original proprietors of the land, a claim acknowledged by the English, as well as the Native inhabitants of the Hills.

7th. The prevailing opinion amongst the latter that these cairns belonged to the early Thautawar people.

8th. The absence of any inscriptions on any of the vessels dug out of the cairns, considered with reference to the fact of the Thautawars having no written language.

9th. The circumstance of some lascars attempting to open a cairn

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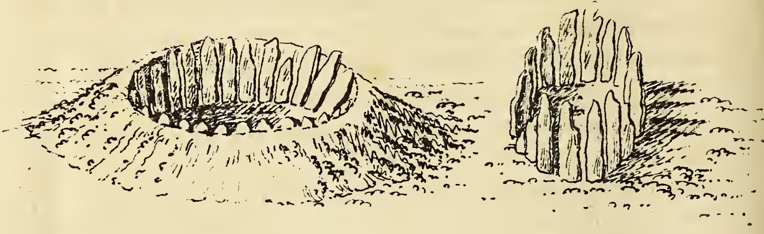
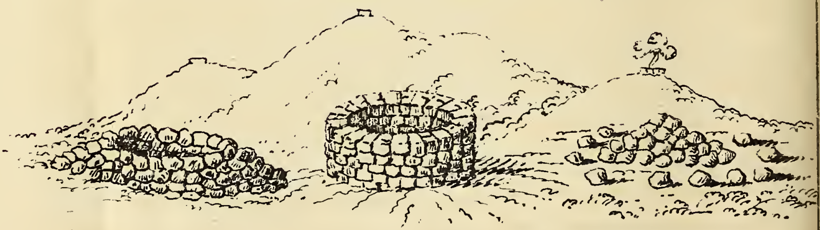
Antiquities of the Neilgherry Hills.

Cairns.





Barrow

environed with a trench and mound.

in search of treasure being compelled to desist in their enterprize by the Thautawars of an adjoining village.

I think it but fair to mention that I do not stand alone in deriving a race of Indian mountaineers from the ancient Scythians; Sir William Jones considered the Massagetœ to have been the ancestors of a race of men inhabiting some mountains in the North of India.

Some persons in Ootacamund have hazarded a conjecture that the cairns are the sepulchres of the Hindoo soldiers of Tippoo's army which passed across these mountains on route from Mysore to Coimbatore. I shall not take the trouble to dispute whether an army belonging to the Sultan did actually cross the Neilgherries although I very much doubt it. And the new theory respecting the cairns is so preposterous and utterly devoid of foundation I should regard it wholly unworthy of notice, were I not anxious that all who take an interest in the antiquities of these hills should be undeceived when fallen into error. I apprehend that the following reasons will at once induce the dismissal of the new theory.

1. The cairns are found not only spread over the surface of the Neilgherries in sequestered woods and on the highest, most distant and almost inaccessible peaks, but they are found as well along the western ghauts nearly as far as Cape Comorin; Mr. Hough says "Tumuli or cairns similar to that just described are scattered throughout the southern ghauts."

I have myself seen the cairns at the extreme eastern limit of the Hills and on their western confines. Nearly every hill in this space which measures 30 miles across has a cairn on its summit. The cairns exist in thousands; in the neighbourhood of Ootacamund alone, hundreds may be found, and they are as thickly spread every where else. On an average each cairn contains 20 sepulchral urns, many have 30 or 40 in them. Now if we find a hundred cairns or 2,000 urns in a square of 5 miles we may fairly expect to discover 350,000 urns on the area of the mountains between Ootacamund and the latitude at which the cairns are no longer found. After this statement if the supporters of the new theory persist in upholding it, they must be prepared to show that Tippoo's army lost 350,000 souls by mere casualties in traversing the Neilgherries; moreover, that the Sultàn's geographical ignorance caused him to march over and along the peaks and irregularities of the western ghauts from Ootacamund nearly as far as Cape Comorin and back again on his route from My-

sore to Coimbatoor. Instead of being the cemetries of an army it must be quite clear to an unprejudiced mind that these edifices are the sepulchres of a great people.

2. Tippoo's army is said to have crossed the Neilgherries about the end of the last century. If the new theorists were correct, the cairns would not be more than 50 years old; but it is quite evident they are hundreds. Their antiquity is manifest from the huge trees that grow from their areas some of which must be three or four hundred years old, their roots have interlaced themselves among the stones composing the walls of the cairns, and in many instances completely environed the gravestones.

The iron and brass utensils occasionally dug up have been so roughly used by the hand of time, that they fall into dust on being touched.

3. I would ask whence it arises that we find no sepulchres of Mussulmen on these hills. Did the entire army of Tippoo Sultan a Mahomedan king, consist wholly of Hindoos? or, if it were a mixed assembly of Hindoos and Mussulmen, I presume the casualties amongst the Mussulmen were as great as amongst the Hindoos, thus although their tombs are not to be found, 350,000 Mussulmen as well as 350,000 Hindoos perished as mere casualties: why! the army of Xerxes could not compare with that of Tippoo Sultan, a fact I have no doubt the new theorists are prepared to maintain.

4. Instead of the limited time, probably two days, occupied by Tippoo's army in crossing the hills from Mysore to Coimbatoor, weeks and months must have been consumed in constructing the cairns which in some cases have walls 8 or 9 feet in thickness and 5 feet high constructed of large stones placed with mathematical exactness in the form of a circle; in transporting the huge slabs of Gneiss and Hornblende Schist serving as gravestones, from distant parts of the Neilgherry range; and in fashioning, manufacturing and baking the urns of clay and their ornamented lids, the workmanship being frequently very elaborate.

5. The cairns are erected on separate hills sometimes many miles apart over an area of upwards of 200 miles long by 20 to 30 broad. The burial places of *an* army on the contrary would be clustered in an insignificant space.

6. If these cairns are the graves of Hindoo Soldiers, why do we

not find in other places where Hindoo Soldiers have died, cairns and urns similar to those on the Neilgherries.

Chapter 2nd.

Blumenbach has separated the human race into five varieties. The first or Caucasian variety includes all the ancient and modern Europeans except the Laplanders and the rest of the Finnish race; the former and present inhabitants of Western Asia, as far as the river Ob, the Caspian Sea and the Ganges; that is, the Assyrians, Medes, and Chaldeans, the *Sarmatians*, *Scythians*, and Parthians, the Philistines, Phœnicians, Jews, and the inhabitants of Syria generally; the several tribes actually occupying the chain of Caucasus; the Georgians, Circassians, Mingrelians, Armenians; the Turks, Persians, Arabians, Affghans, and Hindoos of high caste; the Northern Africans including not only those north of the Great Desert, but even some tribes placed in more Southern regions; the Egyptians, Abyssinians, and Guanches.

The Thautawars of the Neilgherry Hills have all the characteristic features of this variety. Their hair is black, copious and curled or waving. The irides vary from dark to brown. The upper and anterior regions of the head prominent, the face descending perpendicularly below them, it is oval and straight; the features prominently distinguished from each other; narrow and aquiline nose, small mouth, the front teeth of both jaws perpendicular.

Beyond this I regret I cannot pursue the comparison, for the moral feelings and intellectual powers, which in most of the Caucasian race are conspicuous, are of an inferior standard in the Thautawars.

Like the inhabitants of Scythia "their indolence" to use the language of Gibbon "refuses to cultivate the earth and their restless spirit disdains the confinement of a sedentary life." Obeying the customs of their ancestors they migrate from place to place subsisting upon the milk and butter derived from their buffaloes.

The Scythians, it will be remembered by the readers of Herodotus and Homer, subsisted on the milk of mares which they drove in herds before them from place to place.

The Massagetœ a tribe of Scythians allowed but one wife to a man, but the Father of History informs us in Clio that she did not always remain with her husband. This is the case amongst the Thautawars, the woman being allowed to choose a gallant from any other family to whom her husband must on all occasions yield the precedence.

The woman is also obliged to receive as her husbands all the brothers of the family into which she marries, a custom similar to that described by Cæsar as prevailing amongst the ancient Britons (Celtic Scythians). In book the fifth of his Wars in Gaul he says, "Ten or twelve of them live together having their wives in common, especially brothers, or parents and children amongst themselves; but the issue is always ascribed to him who first espoused the mother.

The Celtic Scythians occasionally destroyed their children, a custom which I have already observed once obtained amongst the Thautawars. The dress of the Thautawars consists amongst the men of a cloth wound round the body as low as the knees, passed under the right arm and the end thrown over the left shoulder; a garment that reminds us of the "longe clothes with outen Furroures" described by Sir John Maundeville as worn by a Scythian nation.

The Thautawar women envelope themselves in cloths and decorate their persons with rings and bangles and environ their waists with a brass chain. The women of the Scythians wore rings, bracelets and chains. The opinion of the Thautawars regarding a future state is that after death they are transported to another world, a belief similar to that of the Scythians. The Thautawar women in the manner of the Scythians stain the legs, hands, and neck with a black dye.

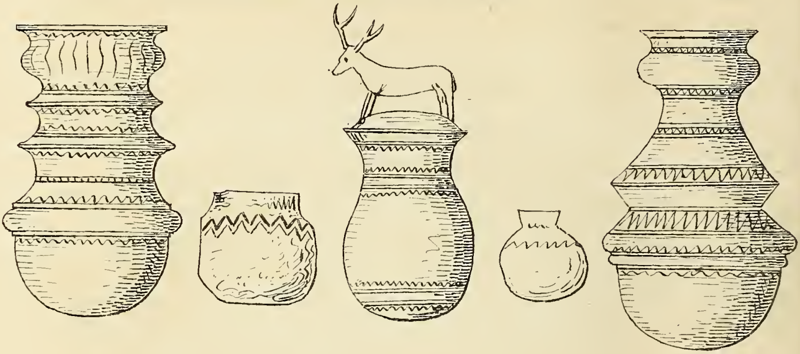
For the present I defer making any more comparisons on purpose to give an account of the opening of a cairn about six miles to the northward of Coonoor.

It consisted of a circular wall of stones about four feet high, and twelve feet in diameter.

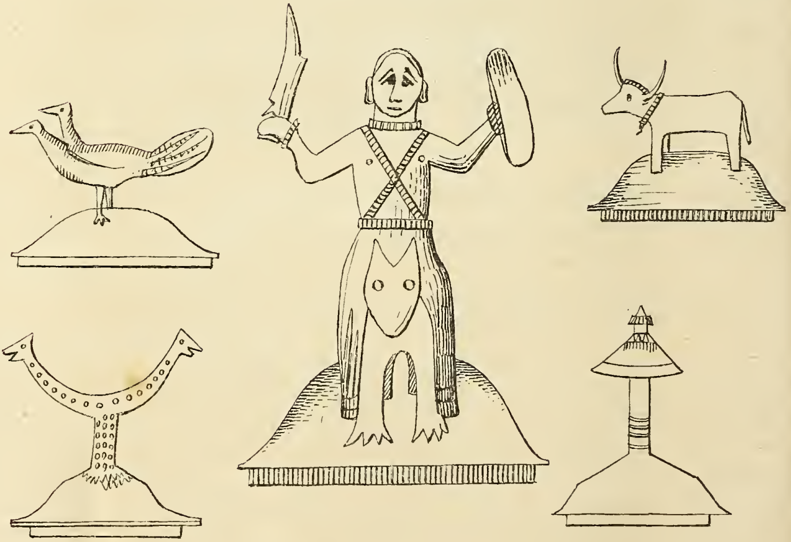
After clearing away the trees and brushwood that overgrew the interior I excavated the soil in the middle of the cairn to a depth of two feet and alighted upon two large stones; these being removed I found two circular urns and some articles in brass and iron, described below, in holes about 3 feet below the stones. The urns contained charcoal and bones. Surrounding the interior of the cairn numerous urns of the description figured hereafter appeared a few inches below the surface, some standing upright with lids on, others thrown upon their side with the lids beside them, many broken into pieces and some of their fragments contained in entire urns: this arrangement of the vessels manifested that they had been disturbed at different periods in order to make room for the burial of other urns.

NATURAL HISTO

Funeral Urns from the Cairns



Urn Covers.



The centre figure has been drawn out of proportion to the rest, and to the Urns, on purpose to exhibit its peculiarities.. The cross belts are curious. The figures are rudely fashioned in pottery, without regard to proportions, hence the size of the warrior, over that of the animal he bestrides, which I suppose was intended to represent a horse..

H. Congreve. Dunphy, L.

Figures of animals and human beings were dispersed in every direction. These are more fully noticed in the subjoined.

Catalogue of Antiquities dug out of the Cairn.

In Pottery.

1. An entire urn 15 inches high, in shape two hollow globes connected by a long neck from which project broad mouldings and fillets giving the vessel the appearance of four smaller ones placed one upon the top of the other. This urn has a lid with a figure of a peacock upon it as a handle, and may be taken as a specimen of the rest in the cairn.

2. Lid of an urn with a coiled snake on the top of it.

3. Cover of an urn, its handle being the figure of a tiger.

4. Ditto surmounted by the figure of an elephant.

5. Ditto having the figure of an animal resembling the hippopotamus for a handle.

6. The figure of a dog standing on the cover of an urn.

7. The head and neck of an unicorn.

8. The figure of a quadruped with four humps on its back.

9. The head and fore-part of a sheep with a bell round its neck.

10. Numerous heads of the buffaloe.

11. A small buffaloe with a bell tied to its neck.

12. A double-headed bird which I can only compare with the old wood-cut of a bird with two heads in the travels of Sir John Maunderville in the M. S. S. of the Harleian Collection.

13. Five figures of birds.

14. An urn cover with a figure holding a shield in his left arm, the right raised and extended as in the act of brandishing a weapon: he has a terrible and frightful aspect, and resembles the Scythian God Woden.

15. A quadruped with a neck out of all proportion, and on whose back are seated two female figures, the first is in a martial costume, a belt passes round her neck and crosses in front, her waist is encircled with a girdle in which is inserted the head of a scabbard, she carries a shield in her left hand, and her right is raised as in the last figure, a necklace passes round her neck and her ears are ornamented with rings. The figure behind her is also a female, her right arm rests on her hip and the left is raised to the head supporting something upon it.

16. Another figure in a sitting posture.

17. Several figures of female warriors like the one before described and similarly accoutred. Their long hair is tied in a knot behind, and braided over it.

In Iron.

18. One iron knife having a broad curved blade and long pointed shaft.

19. A small sickle.

20. A spear or arrowhead.

21. A double spatula.

22. A pair of scissors with a bent spring handle, the ends of which form the blades.

The corroding hand of time has laid very heavily on these relics.

In Brass.

23. A small semicircular brass basin fluted and chased.

24. Two small bells.

25. The rim of another brass basin the lower part corroded away from it.

26. A conical brass vessel not an inch deep, with broad rim which contained a hard mass of powdered charcoal mixed with some other ingredients.

In Gold.

27. A broad gold ring ornamented with three rows of bosses.

In an adjoining cairn I found some urns, figures of animals, one enclosed in the folds of a snake, some human figures in a similar predicament, and one whose waist was encircled by the arm of a wild beast; besides these were a few of the same Amazonian figures found in the other cairn, one with a high conical cap as well as an iron knife ; and an instrument of the same metal, to which I have seen no prototype, resembling two spoons fastened together on their concave sides.

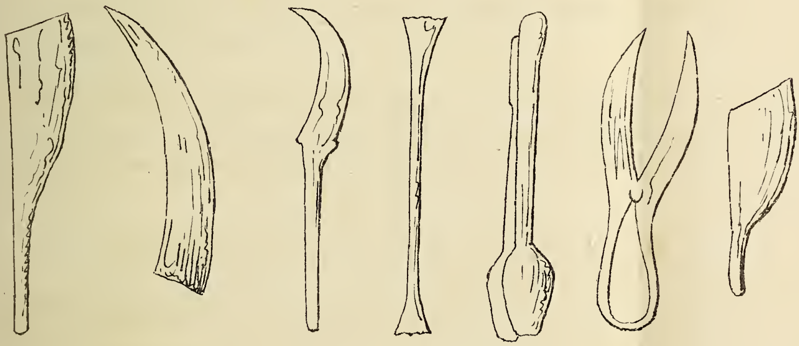
Chapter 3d.

In the course of a conversation I recently had with a Thautawar of considerable intelligence, I gathered that his people fully believed the cairns were constructed by their forefathers ; indeed a gentleman who has resided upwards of ten years on the Hills stated to me the Thautawars claim all the cairns as the graves of their ancient chieftains ; and in the course of my peregrinations over the Neilgherries when-

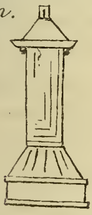
Contents of the Cairns

Brass Vessels 1/6 real size.

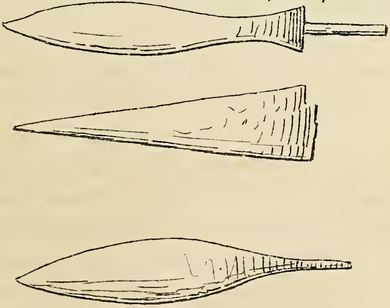
Iron implements 1/3 to 2/9 real size.



Brass phial containing some liquid found in an Urn.



Spear & arrow heads 1/3 to 2/9 real size.



Painted Carnelian bead 2/3 real size.

Gold ring 2/3 real size.

H. Congreve

Dumphy, Lith.

ever I have asked one of the race what the cairns were, I have been invariably informed in reply they were the cemeteries of their ancestors. The Thautawar above alluded to also acquainted me that his people held the cairns in great veneration, though they never approach them, because none but the direct descendant of a Thautawar buried in a cairn, ought to approach it, and they could not now ascertain which were the proper tombs of their direct ancestors. He said also that a *race* called the Punja Pandaver were originally here, and the Thautawars came after them, and from the North-West, that his people had been here from very early times, and had no connection with the Hindus whatever.

There is a tradition amongst these people to the effect that the first God was called *Oonu* who came out of the earth like mist, which seems to refer to the Deluge and to Noah or Nu as he is called in Eastern countries.

Had this statement about the Punja Pandava emanated from a Hindoo I should have considered it nothing more than a version of the story of the five Pandoos prevalent throughout India, but coming as it does from a Thautawar I am disposed to look for some other meaning in it, and dismissing the word Punja as an innovation probably from the Hindoos on the Hills, regard it as a tradition that the Neilgherries were once under the Pandyans of the South of India whose empire at one time was very extensive. I am confirmed in this opinion by the fact that Pandava was the name of the kingdom of the Pandyans, and by what I have elicited from the Burghers, many of whom state that "a race called the Pandaver" (without the prefix Punja) was once settled here.

From the costumes on statues and monumental effigies we are enabled to form very accurate conceptions of the habiliments and ornaments of a former people; and this method of perpetuating a custom contributes greatly to enable a posterity to identify the tombs of its forefathers.

Some female figures in pottery disinterred by me from a cairn on a peak of the Khoondas have considerably aided towards establishing the fact of the cairns having belonged to the ancient Thautawars.

In their houses the Thautawar women wear no covering save what nature has bestowed, unless occasionally a strip of cloth wound round the middle; they however leave their ornaments on, consisting of large earrings, a necklace with an ornament depending from it in front, large bangles on the arms between the shoulder and the elbow, and a chain

round the waist. The effigies found in the cairns are decorated in a remarkably similar manner being destitute of covering in every other respect; with one exception, and this figure has a cloth wound round the middle of her person. The countenances of these images exhibit the Hebrew physiognomy conspicuous in some of the Thautawar families.

Notwithstanding such strong testimony, to the cairns having been constructed by the early Thautawar people, exists, coupled with what I have just adduced, I will have the candour to say it is yet possible these edifices may be the work of a Pandyan people once the inhabitants of these hills.

The urns found in the cairns seem to be of Jain or Buddh fashion, while the animals in pottery resemble those sculptured on the ancient monolithe temples at Mahabaliporam on the Coromandel coast. A tradition of a Pandyan race I found amongst the Polygars of the mountain districts of Papanassum in Tinnevelly; and was told several forts of former Pandyan kings were seated up the mountain: these may have been cairns frequently called forts by the Natives owing to their shape. It is satisfactorily established that the Pandyan kings had their empire in the South of India; and one of the ancient geographers speaks of them. The Romans traded largely with the Pandyan people, and there is every reason to believe Killikerry on the Gulf of Manaar was the chief mart of the pearl trade. At this point probably the Roman coins distributed over the site of the ancient Pandyan empire found their way into India. One of these coins was dug out of a cairn on the Neilgherries some years back.

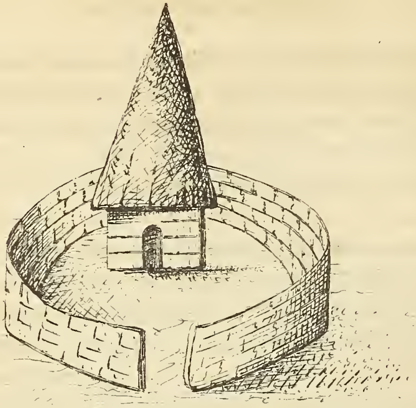
Many Jain temples are simply open areas surrounded by a wall and called *Betta* meaning a hill. The cairns are of this construction and seated on the summit of a hill or peak of a mountain. The urns under the large slabs in the centre of the cairn may have contained the ashes of the males of a Pandyan family whose domestic implements were buried with them; while the urns buried round the interior with less care may have held the remains of the wives perhaps destroyed at a Suttee: the numerous female figures in pottery in the cairns being their effigies. The conjecture derives some force from the family likeness found to prevail among the figures of the respective cairns.

I leave the two theories, both my own, at the bar of public opinion until more facts and further research settle the question.

The adoption of the theory of the cairns having belonged to the

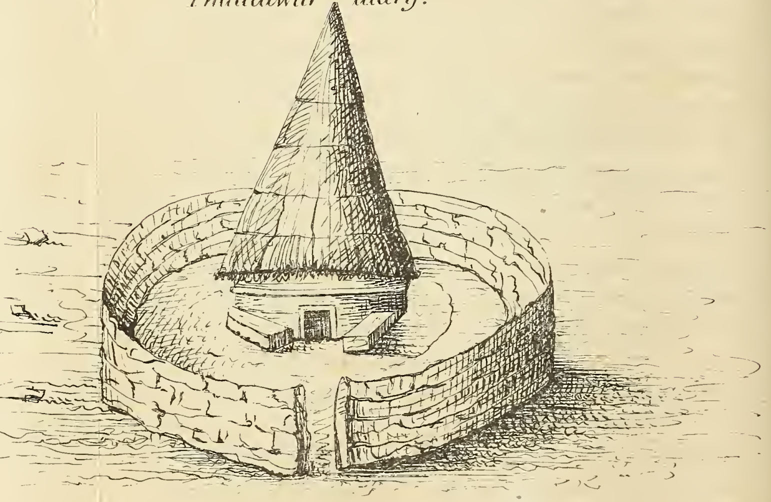
BRITISH MUSEUM

Ancient Celtic House.



From Pictorial History of England and Archæologia, compare with

Thautawar dairy.



Sepulchral Stones similar to those in Europe.

H. Congreve

Pandyans would not shake the stability of my opinion respecting the descent of the Thautawars from the ancient Scythians: contact with the races about them having modified their customs, ideas and language.

The cairns and their contents are not the only interesting vestiges of antiquity dispersed over the eminences of the Neilgherries. Besides these cemeteries and the double and single rings of stones previously spoken of, the antiquary may occasionally meet with those ancient temples of Scythicism, found both in Europe and Asia. Of these, one is of a nature so interesting that I have resolved to add a drawing of it to my sketches of the antiquities of the Neilgherries.

The temple is an open area environed by a circular wall of uncemented stones; in the eastern side of the wall is the entrance.

A huge altar of an oblong form, 30 feet in length, and 11 feet broad, rises to a height of 9 feet from the centre of the area. This temple is precisely what we might look for amongst the ancient Celtic remains in Cornwall and Wales. It stands on the south side of a gently sloping lawn, whose crest is occupied by a Thautawar village and cattle enclosure. A semicircular wall of great antiquity connects the sacred building with the village, and is continued beyond it for some distance to the opposite declivity of the lawn, where it terminates at a Thautawar dairy, the aspect and plan whereof is a perfect fac-simile of a house of the ancient Britons (Celtic Scythians); indeed a drawing of one is an accurate representation of the other. In my possession is a sketch of one of those ancient British houses described in the Archœologia, and without the least exaggeration I might say this drawing would spare me the necessity of sketching the Thautawar dairy. Both structures are circular, and surmounted with a high conical thatched roof; admission to the interior being obtained through a narrow low hole, scarcely deserving the name of a door, in the body of the building. A low circular wall encloses the yard wherein the building stands. A Thautawar denied me admission, stating the building was holy and only accessible to the men of his race. When I asked this man what was the use of the enclosed area and altar on the right of the lawn, he replied it was "Deevra" (sacred,) in other words a church or temple. The word *Deevra* is clearly of the same derivation as the *Deoo* of the Zend; *Deev* of the Persian; *Deva* or *Deveta* of the Sanscrit; *Dewara* of the Canarese; *Deus* or *Divus* of the Latin; *Dieu* of the French; and *Divine* of the English; one of those universal expressions

probably as ancient as certain ceremonies, customs, and superstitions common to all religions, having their origin in that part of Scythia where Noah settled after the deluge.

The perfect coincidence subsisting between the Thautawar dairy and the ancient Celtic Scythian houses, contributes to strengthen my conjecture respecting the affinity of the ancient Scythians with these mountaineers; and I might again emphaticise the striking resemblance of the temples of these hills, with those of the Druids in our own country.

At a distance of two hundred yards to the north of the dairy, I discovered, overgrown by jungle, two cairns on the slope of the seven-cairns-hill, forming a link in the chain connecting the seven cairns on the summit of the eminence, with the open temple on the lawn.

Concealed under a thick shroud of brambles and underwood, these cairns had escaped the observation of those antiquaries who had ransacked the cairns on the summit; and they consequently yielded a valuable addition to my collection, comprehending female warriors on horseback, in pottery, urn covers of the same material ornamented with human figures, and curious animals; a stone pestle, a chased brass vessel, and other relics similar to those previously described. At a subsequent period I opened a smaller cairn in the neighbourhood, which however contained nothing more than an iron arrow-head, and some fragments of pottery embedded under a slab in the centre.

From the middle of many of the cairns, rise trees of prodigious growth, planted by the founders of the sepulchres with a view to protect them in after ages from spoliation. The axe of the "cairn-hunter" has defeated this precaution, and laid prostrate many of these giant protectors; nevertheless, in some instances, from their enormous growth, the trees have realized all the wishes of their planters, and still continue to wave their branches over the undisturbed urns beneath.

The custom of planting trees over graves is of the highest antiquity, and was observed by the Celtic Scythians in Britain; the yew still standing in many of the Church-yards being the tree usually chosen for the purpose.

About two miles from my house in Ootacamund, lies a cairn from the area of which grows a tree of enormous bulk, measuring nine yards in circumference. Myself and three lascars, with our out-

stretched arms joined, could not " put a girdle round about" this tree : the largest I recollect having seen. If testimony were wanting to the antiquity of the cairn, the girth of this tree would amply furnish it ; its roots have entwined themselves amongst the stones of the cemetery, and spread over the entire area. Some enterprising " cairn-hunter" has endeavoured to reach the contents of this cairn by cutting through the roots, on purpose to reach the grave-stone, but his efforts have been foiled ; for after reaching the slab, he found that a root of the tree, having insinuated itself beneath the stone, had wholly occupied the place of the grave. The stone may now be seen suspended in the body of the tree a foot or two below the natural surface of the cemetery.

Near this cairn I discovered a barrow consisting of a circular mound of earth encompassed by a trench. In shape and size it is precisely similar to some of those of the ancient Britons (Celtic Scythians) which, during my late residence in England, I saw on the cliffs of the Isle of Wight and on Salisbury Plain.

Anxious to investigate the contents of this *tumulus*, I ran a trench along its entire length from North to South, and another at right angles; but was disappointed to find nothing. On some of the lawns and terraces of the hills may be seen old walls of piled uncemented stones; leading, from their frequency and association with the rest of the antiquities, to the conjecture that the early Thautawars were much more numerous in former times than at the present day.

Between Ootacamund and Chinna Coonoor lies a ridge covered with architectural remains. At the northern extremity of it is a circular hollow from the area whereof rise several stones once encircling an altar. The altar a monolithe of vast dimensions has been removed by violence from its pedestal at the foot of which it now lies. Great labour must have been employed in transporting this stone to its original position. Altogether the place reminds the antiquary of Bryn-Gwynn in Anglesea, which is a circular hollow surrounded by an immense agger of stones and earth, the case here. Bryn-Gwynn has only a single entrance, likewise the case in the present instance. The Welsh antiquity is supposed to have been the grand consistory of the Druidical administration.

I lately said that bells were frequently found in digging open the cairns ; indeed I discovered two in a cairn near Coonoor ; with reference to this fact, and in further proof of the cairns having belonged

to the ancestors of the Thautawars, I quote the subjoined passage from Harkness' "Description of a Singular Aboriginal Race inhabiting the summits of the Neilgherry Hills" (*i. e.* the Thautawars).

"A bell, which is generally deposited in some niche within the "temple, is the only object to which they pay any reverence. To "this they pour out libations of milk, but merely as to a sacred im-"plement. They do not sacrifice or offer incense, or make any "oblations to it significant of its having in their estimation any "latent or mystic properties.

"To each Teriri is attached a herd of milch buffaloes, part of "which are sacred and from which the milk is never drawn, the "whole being allowed to go to the calves. One among these sa-"cred animals is the chief. Should it die, its calf, if a female one, "succeeds to its office. Should it have no female calf, the bell before "mentioned is attached to the neck of one of the other sacred ones, "and being allowed to remain so during that day, a legal succession "is considered to be effected.

"In the morning the Pol-aul milks one portion of the herd, carries "the milk into the temple, laves the bell with a small portion of it, "and of such of it as he or his attendant may not require he makes "butter and ghee."

The method of obeisance practised by the Thautawars when addressing a superior, is precisely similar to that observed by the early inhabitants of Britain, as preserved in a set of figures on the *Bayeaux* tapestry. In both cases the inferior, his body bent forward, has his expanded hand placed to his forehead, the thumb resting upon it.

A Thautawar woman when she meets her father or brother, after some period of absence, kneels in front of him, and puts her head under his foot. The women of the Scythians wore a gold ornament in the shape of the human foot on the head indicative of their submission to the other sex.

Chapter 4th.

I now proceed to give an account of some antiquities I have lately examined at a place called Fair-Lawn, situated three miles from Ootacamund on the road to the Avalanche bungalow. Fair-Lawn is an open spot in the second wood reached after quitting the Cantonment, and commands the western aspect of the "One Cairn Hill." The antiquities are found to the right and left of the road, on the top of a

hill along the side of which it is carried, and in the valley at the base.

Ascending the hill at the point where the wood commences, I shortly found myself amidst mounds and excavations. A sedulous examination and careful study of them soon convinced me that I stood on the site of an ancient fortified position. My attention was first arrested by a nearly circular mound, seated on the crest of a promontory of the hill; the slope descending from this point towards the east is embraced by two long lines of parapet, concentric with the circular fort at the top, one being above the other. While the rampart of the fort has been built of earth, these lines have been obviously formed by excavation, terrepleins being cut in the side of the hill, so as to leave breast-works projecting out of it. This kind of fortress is the most ancient we have any knowledge of: Old-Sarum near Stonehenge is the best instance of the kind I have seen. This place presents the appearance of several circular grass grown mounds, one within and higher than the other, the centremost and highest having been the citadel. The spaces between the circular ramparts are supposed to have been occupied by separate districts of the city. Old-Sarum was the ancient *Sorbiodunum*, a place of great note in the time of our early Saxon kings, and a capital of the Ancient-Britons (Celtic Scythians) before the Roman invasion.

The ruined fortress at Fair-Lawn suggests a comparison with Cœr Leb in Anglesea, a moated intrenchment supposed to have been the residence of the Arch-Druid and which was of a square form with a double rampart, and broad ditch intervening, and a lesser one on the outside, having within foundations of circular and square buildings.

Two hundred and fifty yards beyond the mounds at Fair-Lawn above described, at a point where the hill turns to the North-west, I reached more ruins of a similar description, somewhat less clearly defined. Beneath this point lies the south margin of the wood, through it a footpath conducts to the lawn which gently descends upon a stream meandering through ravines and hanging woods. *On the North side of the clearing, an ancient circular wall of uncemented stones encloses a space occupied by single and double rings of stones and heaps. Below this place again may be seen another old wall of a circular form, overgrown with jungle, the space within being full of trees. Facing the latter and on the opposite side of the stream, I observed a mass of rock projecting out of the side of* "*Cne*

Cairn Hill." *The position of this stone, the existence of a circle of stones environing its base, traced with difficulty amongst the ferns and high grasses, as well as the presence of several slabs resting against the rock, induced me to believe that the latter had once been consecrated and made to subserve the purpose of an altar or sacred mound.* As I stood upon it, I took notice that upon the bank of the stream underneath lay, sequestered by high banks and depending trees, a mass of stones evidently put together by the hand of man. Curious to examine the heap, I descended, and discovered indications of ancient buildings having once been there.

Thus encouraged I extended my researches, and found similar mounds at the base of the lawn as far as where the stream takes a new direction to the East. I now returned and traced the ruins through the wood. At the North end of it I emerged upon a flat lying between the stream and the fortified hill. At this place the antiquities assumed a more important character, presenting long rows of ruined walls forming streets, and square foundations of buildings. Some of the streets opened upon the stream, others lay parallel to it. Many of the heaps and mounds were higher than the rest, all being covered with loose stones and vegetable soil : the latter manifesting their extreme age. Apprehensive that " the wish might prove father to the thought," and these mounds turn out to be diluvial or fluviatine deposits, I resolved to ascertain by the strictest scrutiny whether my first conjecture was correct ; and accordingly opened two of the mounds, one at the end and forming part of a street, and the second detached. The bases of both proved to be foundations of regularly built walls, the superstructure having fallen down in heaps. The extent of these ruins from North-east to South-west is hardly less than half a mile ; in breadth they are inconsiderable, owing to the narrowness of the valley. The position of the forts imports that they were erected to protect the town and the sacred places adjoining.

This place is seated nearly in the centre of the Neilgherries. No ruins of the same extent have been discovered here. From these and other considerations I conclude, that at a very remote period, upon this spot stood the capital of the ancient Thautawar people. The question now arises, were the Pandaver, or the Thautawars the first here ?

My Thautawar informant, alluded to in a former chapter, distinctly stated the Pandaver were first here, an assertion lending countenance to my surmise of a colony of ancient Scythians having invaded

India, at a period subsequent to its population by the Hindoo race, and established themselves on the Neilgherries, where their descendants are known as Thautawars; in the same manner as the Massagetan Scythians settled in the mountains in the North of India, where, according to Sir William Jones, their posterity still continues.

On the other hand, is the general belief of the Thautawars being the aborigines of the hills. Were this theory established I should be disposed to regard them as the aborigines of the plains as well, a view that would account not only for the existence of the antiquities of Scythicism or Druidism, I have observed in the plains of India, but likewise for their presence on the hills. Scythicism I believe was the religion prevailing among the aborigines of India prior to the Hindoo invasion from Upper Egypt, which aborigines were of Scythian origin.

There was but one point wanting to confirm the identity of the Thautawar and Scythian religions, and that has been furnished by the Rev. Mr. Muzzy, whose personal observation of the religion of the Thautawars entitles his opinion to the utmost respect. This gentleman testifies to the existence of Sabeism amongst the Thautawars. He states in his account of the Neilgherry tribes, published in the Madras *Christian Observer*, that the Thautawars salute the sun and a burning lamp when first seen. This superstition belonged to the Scythians. Herodotus informs us that of the Scythian Divinities, *Vesta* the goddess of fire was without competition the first. He also enumerates *Apollo (the sun.)* The sun is said to have been one of the great gods of the Asiatics under the name of Mithra. We have already seen from Diodorus of Sicily that the ancient Britons (Celtic Scythians) worshipped that luminary under the name of *Apollo*, and it is supposed by some that the Cromlechs found in Western Europe, which belonged to the Celts, were altars upon which the sacred fire was constantly kept burning. Herodotus also mentions in Clio that the Massagetœ sacrificed horses to the sun, their only deity, thinking it right to offer the swiftest of mortal animals to the swiftest of immortal beings.

Let me now compare the sacrifices of the Thautawars to their deity, with those of the ancient Druids, (Celtic Scythians). My authority for the ceremonies practised at the former is Mr. Muzzy, who says:

" On some occasions the victim is a calf, in the selection of which great pains are taken. It must be of a certain age and free from all blemishes; numbers are often rejected before a proper one is found.

When the victim has been selected, it is brought to a thick and dark forest where a pile of wood and brush is erected. The officiator, having received a piece of money from the offerer, approaches, having in one hand a bunch of the leaves of the sacred tree, and in the other a short thick club. After waving the leaves many times around the victim and making many salutations to the East, he strikes it with the club on the back part of its head, which generally proves fatal in the first instance. Immediately whilst the limbs are yet quivering, all present throw up their hands and eyes to heaven, and exclaim, may it be an offering from—naming first one and then another of their several places."

" The waving of leaves then continues."

The subjoined account of one of the Druidical sacrifices is extracted from the article Druids in the Encyclopœdia Britannica.

" They prepared every thing ready for the sacrifice under the oak, to which they fastened two white bulls by the horns; then the Arch-Druid, attended by a prodigious number of people, ascended the tree, dressed in white; and with a consecrated golden knife or pruning hook cropped the misletoe which he received in his *fagum* or robe, amidst the rapturous exclamations of the people. Having secured this sacred plant, he descended the tree, the bulls were sacrificed, and the deity invoked to bless his own gift."

Since writing my account of the antiquities at Fair-Lawn I perused the article " Druids" in the same book, and found the account of the sacred enclosures of the Druids so singularly corroborative of my views, that I make no apology for inserting it.

" The consecrated groves in which they performed their religious rites were fenced round with stones, to prevent any persons entering between the trees except through the passages left open for that purpose, and which were guarded by some inferior Druids to prevent any stranger from intruding into their mysteries. These groves were of different forms; some quite circular, others oblong, and more or less capacious, as the votaries in the districts to which they belonged were more or less numerous. The area in the centre of the grove was encompassed with several rows of large oaks set very closely together. Within this large circle were several smaller ones surrounded with large stones; and near the centre of these smaller circles were stones of a prodigious size and convenient height, on which the victims were slain and offered. Each of these being a kind of altar, was surrounded with another row of stones, the use of which

cannot now be known unless they were intended as cinctures to keep the people at a convenient distance from the officiating priest."

Here I request the reader to compare the italicized passages in my account of the antiquities of Fair-Lawn with the foregoing extract.

A few more words remain to be said here regarding the cairns, sufficiently important however to entitle my views about them to further consideration.

The cairns on the Neilgherries, it has been seen, contain an urn or urns holding burnt bones and charcoal, brass vessels, knives, and spear heads, carefully buried under a large stone in the centre, with numerous other urns dispersed under the surface. Compare this with the following extract from the article "Cairn" in the Encyclopœdia Britannica.

"Such might have been the reasons in some instances, where "the evidences of stone chests and urns are wanting: but these "are so generally found that they seem to determine the most usual "purpose of the cairns in question to have been for sepulchral mo-"numents."

"The stone chests, the repository of the urns and ashes, are "lodged in the earth beneath: sometimes only one, sometimes more "are thus deposited; and Mr. Pennant mentions an instance of 17 "being discovered under the same pile."

The founders of the cairns in Great Britain were Celtic Scythians, and I am endeavouring to show that the Thautawars belonged to the same family.

I recently opened a small cairn and found in it an urn just capacious enough to hold the partly burnt *cranium* of a human being; within this skull was another vessel full of mould. The skull and knee bones of a deceased Thautawar having been kept for some months subsequent to the cremation of the body, are burnt and buried.

A kind of cairn has recently fallen under my observation, that I have not before seen. Instead of the circular mound of stones with a well in the centre, a circular space is enclosed by slabs several feet high, set on end touching each other.

Dr. Thomas Browne in his Hydriotaphia or Urnburial states the practice was in use amongst the Celts, Sarmatians, Germans, Gauls, Danes, Swedes, and Norwegians.

It is worthy of observation that the contents of some urns dug up in London contained many things in common with those found on

the Neilgherries, viz. Bottles of liquid (a small brass bottle full of some liquid was recently found in a cairn near Kotagherry) nippers or tweezers to pull away hair, spoons, knives, nails, &c., and " nuts of crystal" (I found in an urn two beads or nuts of cornelian.)

Pomponius writes the Druids and ruling priests used to burn and bury.

Sir Thomas Browne affords another striking proof to my theory.

" Nor were they (the Scandinavians) confused or careless in disposing the noblest sort, while *they placed large stones in circle about the urns they interred.*"

Chapter 5th.

Without noticing the cairns, the remains of Scythicism found in these hills, consist of,

1. Single and double circles of stones enclosing an open area.
2. The same enclosing smaller rings.
3. Open temples consisting of a high wall of stones enclosing a large altar.
4. Monolithe altars and single stones encircled with rings of stones and having slabs resting against their bases.
5. Large spaces, enclosed by a wall, full of trees.
6. Circular walls of considerable extent enclosing double and single rings of stones.
7. Barrows.
8. Sacred groves.

And my reasons for believing them to have belonged to the early Thautawars are,

1st. The claim of these people to them.

2nd. They are nearly in every instance seated near to and connected with a Thautawar village.

3rd. The religion of the Thautawars is Scythicism and these are monuments of Scythicism.

4th. They differ wholly from any Hindoo religious edifices, and there is no reason to believe any people but the Pandaver (Hindoos) and the Thautawars were ever settled on these hills.

5th. The absence of inscriptions or coins, with reference to the fact that the Thautawars have no written language, and were unacquainted with the use of money, while the Hindoos had both.

Arrived at this point I think it proper to recapitulate my grounds for concluding the Thautawar religion to be Scythicism.

1st. The worship of the deity in groves of the profoundest gloom.

2nd. The use of sacred trees and hallowed bunches of leaves, on the part of the Thautawars, compared with the sacred oaks and bunches of misletoe among the Druids.

3rd. Sacrifices of female children, now happily abolished.

4th. The sacrifice of bulls and calves.

5th. The affected inspiration of the priests and their mode of life.

6th. The adoration of the sun.

7th. Their reverence for fire.

8th. The funeral rites and sacrifice of buffaloes compared with the sacrifice of horses amongst the Scythians on similar occasions.

9th. Their notion of a future state.

I shall conclude this Chapter with a brief recapitulation of my reasons for considering the Thautawars of Scythian descent.

1st. The identity in the religions of the respective people, viz. Thautawars and Scythians.

2nd. The physiological position of the Thautawars in the great family of the human race, is the same as that of the Scythians.

3rd. The pastoral mode of life of the Thautawars, and their migrations from place to place driving before them herds of the buffaloe ; as the Scythians, under similar circumstances, did their horses.

4th. The food of the Thautawars, which consisted originally of milk and butter, was that of the Scythians.

5th. Their architecture, religious, military and domestic ; is the same, the yards of the houses of the Thautawars, their temples, their sacred enclosures, their kraals for cattle, are circular as were those of the Celts and indeed of most ancient people whose divinity was Sun, Light, Fire, Apollo, Mithra, &c. &c., or the same power under any other appellation.

6th. Their marriage customs and funeral rites are nearly identical.

7th. Their ornaments and dress closely approximate.

8th. Their customs are generally similar.

9th. The authority of Sir William Jones, that the ancient Scythians did people a mountainous district of India.

10th. History mentions that India has been invaded by Scythian hordes from the remotest times.

11th. Their utter separation in every respect from the races around them.

Chapter 6th.

In many places on the Neilgherries I have observed single upright stones, of the form usually found in the Church-yards of Europe, marking burial places and used for the same purpose here.

Upright stones of large dimensions from 5 to 10 feet high, some shaped to a point at their summit, others flat, are occasionally found on the Neilgherries on the summits of hills perhaps once consecrated. These single stones are of common occurrence in England and by antiquaries are pronounced to be Druidical relics. The one I have the best recollection of, called the Longstone by the country people, is situated near the village of Mottestone in the Isle of Wight. The name of the village is derived from the stone. The word " Mot" is Saxon, and the same with " Gemot," signifying " a meeting together." The stone was probably the sacred mount or *rostrum* from which the priests addressed the people, or was one of the mystic stones of their religion.

Were other evidence wanting the numerous ruined Todawar villages on the Neilgherries sufficiently attest, that the ancestors of this race were a great people. And Lieut. Ouchterlony of the Engineers has recently discovered traces of a large road conducting from the Neilgherries to the Coimbatoor country along the valley of the Bowany.

I have already said that numerous figures in pottery of the buffaloe always occur in opening the cairns and the buffaloe is an object of superstition amongst the Thautawars. Gildas an English monk who flourished about the year 511 and whose account of the religious usages of our Celtic ancestors is, I believe, the only one handed down to us by a countryman, for I purposely omit the meagre accounts afforded by foreign authors. Cæsar, Tacitus, &c., says, the idols of the ancient Britons had the countenances of bulls ; whence Hearne derives many of the names of the towns in the neighbourhood of Stonehenge such as Bullansdown that is, the down of the bull's temple ; Bulford, &c. It is a curious fact that numerous cows horns and heads have been dug up in the neighbourhood of Stonehenge, our most celebrated Druidical temple.

Half way between the Avalanche and Ootacamund lies a round low hill uncommanded by any other eminence, having remarkable excavations around its base. Some who have seen this place have

regarded it as the remains of an entrenched camp, a view in which I entirely concur and am disposed to compare it with the British (Celto Scythic) encampments or stations near Dorchester, which are placed on insulated hills and surrounded by circular or square earthworks.

It will be recollected I have described barrows amongst the remains of Scythicism found on the Neilgherries, they contain urns and other antiques similar to those discovered in the cairns. In England barrows are generally found in the neighbourhood of stone circles such as those I have here discovered, and near other Druidical remains.

The following account of the opening of a barrow on Deverel Down in Dorsetshire is so corroborative of all I have advanced that I make no apology for inserting it.

" On beginning to open this barrow, it was found to consist en-" tirely of a heterogenous mass of flints, charcoal, and broken " pottery, and it was probably reduced to this confused state by " previous explorers, who removed all the ornaments, and other " articles of value, and destroyed a portion of the rude clay-urns, " and such articles as were considered worthless. Thus, it is proba-" ble that the rich store of ancient vases, which were found entire, " was only a small part of the original number contained in this " barrow; the larger part of whose contents had been reduced to a " disorderly mass of shapeless fragments, by the rough usage of " those who only opened the tumulus in the hopes of finding " treasure."

" On examining more minutely, however, a compact bed or pave-" ment of flints, firmly wedged together, was found, constituting as " it were, a floor to the barrow. The central part of the mound was " therefore dug away, down to this floor, which was on the natural " surface of the earth. When the central part had thus been remov-" ed, a singular spectacle appeared. On the level compact floor, " just described, were arranged twenty large stones, of various irre-" gular shapes and sizes. They were placed in a semicircular form, " and the two extreme stones were much larger than the others. " There were also three other smaller stones, not forming part of " the general crescent, but placed by themselves. On removing " some of the smaller stones, and on digging down to a lower level, " it was found that immediately beneath each stone was a rude

" earthen vase, placed in a *cist*, or case, cut in the solid chalk, and " covered by the stone. In this manner each stone of the great " crescent covered a vase, except the two large end stones, which " are therefore concluded to be altars. They are each about four " feet long, and of a conical shape, but one is placed upright, like a " sugar-loaf, and the other is laid flat."

" The vases, or urns, contained each the ashes of a human being, " mixed with charcoal, which also constituted a great part of the " substance of the barrow, and was probably the result of the funeral " piles. The urns thus buried under the stones of the great cres- " cent were not eighteen in number, but only sixteen; because at " two different places it was found that two adjoining stones did not " cover two urns, but that they concealed a third stone, beneath " which was an urn. All the other stones, however, had each a " separate vase. One of the three stones, separate from the crescent, " as described above, also concealed an urn: the other two had " none; but near one of them were found two rude cups; one con- " taining a very rich earth, the other the bones of a bird.

" There were also four urns found buried in the floor of flints, " but not covered by stones. Three of them fell to pieces, but the " remaining one was the largest of the whole assemblage, and differ- " ed from all the others in being placed with its mouth downwards. " This made a total of twenty-one urns, of which seventeen have " been preserved, principally entire, but a few in large fragments."

Chapter 7th.

Hitherto I have paid little attention to the language of the Thautawars. Mr. Muzzy thinks a connection would be found between it and some Western language, a comparison with the Gothic, Celtic and other ancient languages of Europe is a great *desideratum;* but should no affinity be found to prevail, I should not consider the absence detrimental to my views, for this reason, that people of Celto Scythic origin, having various languages have been widely dispersed. The Parthians and Britons for instance.

Chapter 8th.

I have recently lighted on the following passage in a paper on the Druidical remains in England by Mr. Woodham.

" Structures of this kind are in India known by the appellation " of 'Pandoo-koolies;' we find like erections also in many other parts

"of the globe, and to doubt for a moment of their having had the "same origin would be absurd, as they all bear the same striking "characteristics, whether they be in India, on the shores of the "Mediterranean, in France, Denmark, in Sweden or Norway, or on "the coast, or in the interior of our island."

"Pandoo-koolies," says Mr. Hough in his letters on the Neilgherries, is the term applied by the Natives to the cairns on the Malabar side of the mountains.

When comparing the barrows of the Neilgherries with those in Dorsetshire, I omitted to mention that in one of those ancient Celtic cemeteries was found a young bullock's head enclosed in a *patera* of earthenware. It is very remarkable that in resemblance between the urns found in the English barrows and the urns of the Neilgherries extends even to the material; in some of the Dorsetshire barrows the urns were made of a highly finished and glazed red pottery. Many of the Neilgherry urns have been admired for this rich red glazing, particularly one discovered by Mr. Moegling. The zigzag or harrow-headed-moulding moreover which is the usual ornament of the Celtic-urns is conspicuous on all found on the Neilgherries.

Chapter 9th.

As the object of my investigations is the truth, and I am not obstinately espoused to any one of my theories to the exclusion of the probabilities of another, I shall now recur to what I have previously advanced respecting the possibility of the ancient cairns having belonged to a people whose religion was Buddhism or that branch of it adopted by the Jains. Even were this established, it would not detract from the force of my arguments respecting the descent of the Thautawars from a Celto Scythic ancestry, who burnt their dead and enclosed the ashes in holes or urns buried under cairns; because the Thautawars of the present day preserve the practice. In favor of the cairns being the cemeteries of Buddhists are the following reasons additional to the ones previously adduced.

1. There is a tradition to the effect that the Pandavers once inhabited the Neilgherries. By this term perhaps may be understood the Pandyan kings of Southern India, though literally translated, it means the ancient gods, but as Ionism or the apotheosis of mortals has prevailed in India as elsewhere, we may render it the ancient rulers.

These Pandavers were probably Buddhists or Jains.

Mr. Woodham, speaking of the Pandoo-koolies, states, that a being called Pandoo and his children are supposed to have been the authors of those edifices. The literal signification of the term Pandy-kooly appears to be, an ancient grave. The word Pandi is used by the Hindoos to express any thing ancient, thus Pandi-rajah means ancient king, Pandi-kooly ancient grave and so forth.

2. The fashion of the ornamented urns found in the ancient cairns on the Neilgherries approximates to the style used in the religious edifices of the Buddhists.

3. Numerous figures of horsemen armed with swords and shields are constantly dug up from the cairns, occasionally two human figures bestriding one horse, and a human figure seated with his legs crossed beneath him, are likewise found. It will be recollected that similar figures are common in the architecture and paintings of the Buddhists.

4. The representation of a chuttar or umbrella in pottery occurs in the cairns as a handle to the urns, and it is a very frequent subject in the Buddhist paintings.

5. Figures riding on elephants are found in the cairns.

6. Animals of the most grotesque and monstrous forms, with obscene images of human beings, are common to the Buddhist temples and to the Neilgherry cairns.

The nakedness and colossal stature of many of the human images compared with their horses and other animals, found in the cairns, suggests the recollection of the Gomuta of the Jains, or Gotama.

Reviewing these and the former arguments, barren when compared with those which support my view of the ancient cairns having belonged to the early Thautawars, I am fain to embrace the latter theory, and ascribe the ancient and modern cairns to the same people. But it may now be necessary to account for the difference prevailing between the highly ornamented urns in the former and the plain rude vessels in the latter. Time, the exterminating irruptions of the Polygars amongst the Thautawars, the migratory habits of this people, and their reduced condition from a great race to an insignificant remnant, have contributed to banish from amongst them all recollections of the arts of their forefathers. The fashion leaning to the Buddhist style of art maintained in the urns and their lids, may have been acquired by the Thautawar constructors of the "early"

cairns from the Buddhists about them. In the "earliest" cemeteries of this kind probably of an antiquity far beyond the Christian era, the urns are of the most pristine character: the Buddhist fashion not being yet apparent. In such cairns nearly all traces of metal implements have disappeared; gold in shape of rings occasionally being found and that very seldom; the walls of these cairns are nearly crumbled down to the adjoining level. It is in the next or "early" cairns for I class these edifices into three periods of construction expressed by "earliest," "early," and "recent," that the Buddhist fashion is seen upon the ornaments, which are accompanied by iron implements warlike and domestic. The third or "recent" period of construction is typical of the retrogression of the Thautawars to the uncivilized and unimitative habits of their forefathers through the operation of the causes just assigned. In all these periods the effigy of the cow or buffaloe in pottery is found. Amidst the images occurring in the cairns of the second period are many, nevertheless, which bear considerable resemblance to the Thautawar people. I have already described some effigies of females from the cairns of Pycara singularly corresponding with the costume of the female Thautawar, and Mr. Moegling dug up at Kotagherry a figure in pottery, the first view of which induced me to exclaim it was the exact representation of a Thautawar carrying an axe upon his shoulder. A short time back I dug up a figure in pottery whose lineaments are of the Thautawar race and which is armed with a club, the weapon of the modern Thautawar.

The prevalence of the Buddhist character in the urns of the middle or "early" period assists us in determining the advent of the Pandaver to the Neilgherries as subsequent to that of the Thautawars: inasmuch as I apprehend the latter borrowed the decorative style of Buddhist art from them. The Thautawars have a tradition to the effect of their once having been under the domination, and exposed to the tyranny of a foreign prince, from which it would seem that the Pandavers established themselves in the ancient lands of these aborigines by right of conquest.

The Buddhist fashion obtaining in the urns is not the only point of resemblance subsisting between the Thautawar customs and those belonging to a Buddhist people. Several others occur which, to my surprise have been overlooked by those authors who addressed themselves to describe the religion and usages of the Thautawars.

1. The custom of Polyandria, or one female associating with all

the brothers of one family is common to the Thautawars, and to the Buddhists of Tibet.

2. The suspension of a bell in the places of worship is found among the Thautawars and the Buddhists.

3. The priests of the Thautawars may resign the sacerdotal office at pleasure, an usage prevailing amongst the Buddhists.

4. The Thautawars have two classes of priests, so have the Buddhists of Tibet.

5. The pointed sacred dairy of the Thautawars in some respects resembles the temples of the Buddhists.

6. The practice of burning and burying prevails both amongst the Thautawars and the Buddhists.

7. The veneration for particular mountain peaks is common to both.

8. The villages of the Thautawars have a striking resemblance to those in Ceylon.

9. The Thautawars have a tradition that their ancestors were subjects of Ravannah with whom they fled before Ramah. This Ravannah according to the Hindoo accounts ruled in Ceylon. Harkness referring to this tradition states his impression that the Thautawars borrowed it of the Hindoos.

10. The Thautawars adore the sun; and Buddha under the name of Akabandhu is regarded by his sect as the kinsman of the sun.

But singular to relate these are amongst the conspicuous points whereon I have based my theory of the identity of the Thautawars with the Celto Scythians: thus I have shown that Polyandria prevailed amongst our Celtic ancestors in Britain.

That the bell was an object of superstitious regard amongst the Celto Scythians who buried it in their graves. Speed in his chronicle represents an ancient Briton with a lance in his hand to the end of which was fastened a bell, and the custom of hanging bells in churches in Europe appears to have been derived from the ancient usages of the earliest inhabitants.

It has been seen that the Celts burnt their dead.

The resemblance between the Thautawar sacred dairy or temple and the ancient Celtic houses has been pointed at.

The resemblance between the Singalese villages and those of our Celtic ancestors has been considered so striking as to induce many learned men to declare some connection must have subsisted between the inhabitants of Ceylon and the ancient people of Britain: an

opinion deriving considerable support from an old book entitled "The Welsh Triads," containing an account of the ancient Britons. In this curious literary relic it is stated that the Britons came originally from the country of Summer called Defrobani. The word Defrobani is obviously the same with Taprobana, the old name of Ceylon used by Dioderus, Pomponius Mela, Pliny, Strabo, Ptolemy, &c.

The Llamas of the Tibetian Buddhists were interred without being burnt as were the rest of the people, the body being placed in a sitting posture, the legs doubled under it in such a manner as to make the back of the thigh rest on the calf. Skeletons in the same attitude have been discovered in some of the Celtic barrows in Europe.

Discerning so many points of resemblance common to the religion and customs of the Buddhist invaders, and to their ancestors and themselves the contemporary Thautawars, I may fairly conclude, were the more disposed to imitate the style employed by the Pandavers in fashioning their burial urns. Nay more, in the Buddha of these people the Thautawars would find the Scythian god Wod, Oden, or Woden; for Sir William Jones has demonstrated that they are the same.

In describing some antiquities found in a cairn of the second period at Coonoor, I remarked upon the resemblance an armed figure in pottery bore to Woden.

In a fragment of Clitarchus preserved by Megasthenes I find mention of a sect of Indians called Pramnœ described therein as "a contentious and argumentative set of men, who deride the Brah-"mins as arrogant and ridiculous." These Pramnœ were divided into four classes, the Mountaineers, the Naked, the Citizens, and the Rural. I cannot doubt that these were the Buddhists, and the fragment is of service to me as it shows that a large proportion of these people inhabited mountains.

I have recently seen Lieutenant Newbold's description of the colossal statue of Gotama at Sravana Belgula, which runs thus: "It "is entirely divested of drapery in an erect position, facing the "North, and has the curly hair, large pendulous ears, and thick lips "so peculiar to Jaina images; the placid expression of the features "reminds one of the head of Memnon: the legs are wreathed with "Ruttimulli leaves sculptured in the granite and together with the "hands are clumsily executed."

So exact an account of a figure in pottery excavated by me from a cairn, is the above, that I am persuaded the prototype of it must have been Gotama or Buddha. I was immediately struck on seeing it with its resemblance to the heads of Memnon in the British Museum.

This custom of making images in earthenware is of the highest antiquity if we may rely upon the subjoined extract from Epiphanius:

"And from the times of Tharra the father of Abraham, they in-
" troduced images and all the errors of idolatry; honoring their
" forefathers, and their departed predecessors with effigies which
" they fashioned after their likeness. They first made these effigies
" of earthenware, but afterwards according to their different arts they
" sculptured them in stone, and cast them in silver and gold, and
" wrought them in wood, and all kinds of different materials."

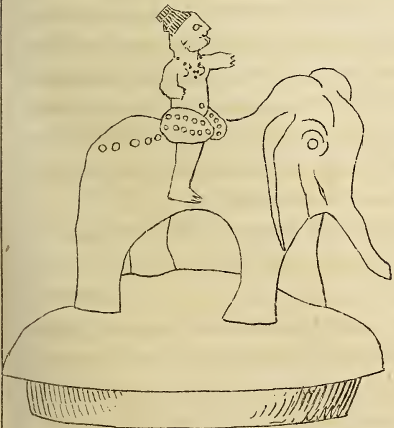
With reference to a preceding statement respecting the identity of Woden with Budden, it is worthy of remark that our Wednesday or day of Woden corresponds with the Budhvar of the Hindi and the Budden or Bothenculloomay, *i. e.* the day of Budden, among the Hindoos.

Chapter 10th.

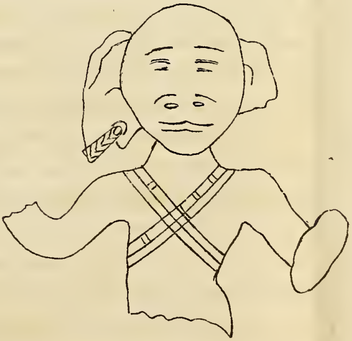
Let us now enter the sacred *lactarium* or temple of the Thautawars, and observe what is inside to indicate that the votaries of its religion were Scythicists. It will perhaps be better to select another author's account to be as impartial as possible. Captain Harkness states he was told by a Thautawar "that the sacred dairy before men-" tioned was the tabernacle of their god; that it was divided into " two apartments, in one of which were performed the offices of the " dairy, and that the other was appropriated solely to the idol." At a later period that gentleman penetrated into one of these sacred edifices unobserved by the Thautawars who were averse to any stranger even a Brahmin entering the place. He contrived to remove the door and discovered that the interior of the building was separated by a partition into two chambers. Passing from the outer or the *lactarium*, through a narrow opening in the partition, he discerned at the extremity of the inner room or *cella* a shining object opposite the entrance, which on being examined proved to be *a single stone*. On each side of the entrance to this sanctuary were little niches in the wall, apparently intended for lamps.

Handles to Urns, in Pottery.

Godama?



Godama Memnon?



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This *single stone*, I have no hesitation in saying, was the idol referred to by the communicative Thautawar.

My readers acquainted with the forms of the Scythic or Druidical religion, from what I have previously written will have expected such an issue to an examination of the Thautawar temple. They will recollect that the *single stone* was the most conspicuous instrument of superstition in the Druidical religion. Shaped to a point at the top, in most cases, and inserted in an upright position in the ground, it was regarded by the priests as an emblem of the solar ray, or their deity the sun. The Pyramids and Obelisks of the Egyptians terminating in a point possess the same signification, and were probably commemorative of Osiris or Anubis, under which names the sun was adored by them.

Mountain peaks which are natural Pyramids of vast dimensions, in all likelihood were venerated by the Druids as they now are by the Buddhists and Thautawars on the same account.

In one of the Chaldean Oracles of Zoroaster, given on the authority of Proclus the Platonist, occurs the following passage:

"Theurgists assert that he is a god, and celebrate him as both "older and younger, as a circulating and eternal god, as understand-"ing the whole number of all things moved in the world, and more-"over infinite through his power, and of a *spiral form*."

Now, this *spiral form* of a deity is only another expression for *flame* the great emblem of god among the Magi; and the Obelisk or *spiral stone* of the Egyptians; and the upright stones of the Druids are nothing but types of the same superstition: indeed in all Pagan religions we find traces of the primeval form of worship adopted by the children of Adam, and more fully made known in the 22nd chapter of Genesis in the following verses:

"7. And Isaac spake unto Abraham his father, and said, My "father: and he said, Here *am* I, my son. And he said, Behold "the fire and the wood: but where *is* the lamb for a burnt offer-"ing?"

"8. And Abraham said, My son, God will provide himself a lamb "for a burnt offering: so they went both of them together."

"9. And they came to the place which God had told him of; "and Abraham built an altar there, and laid the wood in order, "and bound Isaac his son, and laid him on the altar upon the "wood."

"13. And Abraham lifted up his eyes, and looked, and behold be-"hind *him* a ram caught in a thicket by his horns: and Abra-"ham went and took the ram, and offered him up for a burnt offer-"ing in the stead of his son."

In all countries the descendants of Noah have under some form or other preserved the recollection of this ancient rite. We have just seen how the Egyptians, Chaldeans, Druids have done so. Amongst the Greeks it was perpetuated in the worship of Apollo and Vesta. The ancient Mexicans and Peruvians worshipped the sun. The Hindoos adore this luminary under the name of Surya. The Chinese as Foh, the same perhaps with Buddha.

Nor can it be doubted, I think, that the pious Patriarch Noah was acquainted with the future redemption of his race through the mediation of the Second Person of the Trinity, either by Divine intimation, or orally from his forefathers. This great promise or prophecy, even after his posterity had fallen into the errors of idolatry, was perpetuated in their religions: the most imperishable records of nations. Without referring to the Hebrew religion, the remembrance of the Patriarch's revelation has been most carefully treasured, although perverted and degraded by its idolatrous association, by the most ancient people. The Egyptians of Thebes had a Triad god, the principal member of which was called Amun.

The means of the sacrifice or atonement appear in the Crux Ansata or cross of Hermes, so full of mystic meaning, among that people.

In the Hindoo religion Vishnu the preserver is the second person of its triune god.

The promise has been also preserved by the Hindoo descendants of Noah in the parentage, name, and death of Chrisna, another name of the preserver.

In the Greek Mythology the Triad occurs in Cœlus, Terra and Saturn.

The Chinese Foh is a triune god.

The following extracts from the Chronicles of Zoroaster manifest that amongst the Chaldeans the same promise was cherished:

"The Monad is there first where the paternal Monad subsists."

"The Monad is extended which generates two."

"For the Duad sits by this, and glitters with intellectual sections, "to govern all things, and to order each."

" The mind of the eternal father said into three, governing all " things by mind."

" The father mingled every spirit from this Triad."

" All things are governed in the bosoms of this Triad."

" From these flows the body of the Triad, being pre-existent, not " the first, but that by which things are measured."

" For in the whole world shineth a Triad, over which a Monad " rules."

" Abundantly animating light, fire, ether, worlds."

But these are only a few of the many instances existing of faiths wherein we find a foreshadowing of that Great Religion which is destined to supplant them all.

I recently alluded to the existence of single upright stones terminating in a point, on the Neilgherries. The most remarkable I have yet met with crowns the summit of a hill between Macoorchee and Ootacamund. In England these upright stones occasionally are found in the shape of pillars, amongst the most remarkable of which is one described by Mr. Pegge in the Archæologia as occurring in the Church-yard of the village of Rudstone or Redstone. I think I saw one in the Church-yard of Wolverhampton in Staffordshire.

In many of our ancient Churches we find vestiges of the Pagan religion of our forefathers; indeed in the *spire* of the European Churches the antiquary discovers the Obelisk or *spiral stone* of the religions of former times; however, this instead of being a subject of concern to him if he be a Christian, should rather be one of gratulation, as indicating the triumph of the religion of the cross over the gross systems which preceded it. In the aisles, nave and chancel of our modern Churches we are reminded of the double rows of stones enclosing the centre of the Druidical temples and conducting to the adytum; as well as of the temples of the Roman and Greek religion; and of the pagodas or temples of the Hindoos and Egyptians. In the propylon and pronaos of the latter with its lofty tower over the entrance, we discover the turretted entrance of our own Churches; and in the peristyled courts of those edifices and of the Greek temples we again see our nave and the ranges of columns which separate it from the aisles. In every case the *cella* or sanctuary corresponds with the chancel. As the thoughtful and devout mind contemplates this resemblance and connects it with the fact that the Christian reli-

gion by certain but gradual strides has superceded in so many ancient countries the Pagan superstitions that once prevailed, it finds further subject for gratitude, and cherishes the hope that at no distant period, not only will an architectural resemblance subsist between the religious edifices of the Christian world and those of heathen countries, but that the same religion—the revealed religion of the Saviour—will be as permanently established and its doctrines as fervently preached in one as in the other.

Returning to my immediate subject, the consecrated stones of the ancients—I may remind the reader that not only was the worship of the sun or of fire in its various forms a deviation from the earliest form of sacrifice, but that the consecration of upright stones had its origin in, and was a perversion from a custom amongst the earliest descendants of Noah, thus spoken of by the inspired writer in the 28th chapter of Genesis:

"18. And Jacob rose up early in the morning, and took the "stone that he had put *for* his pillows, and set it up *for* a pillar, and "poured oil upon the top of it."

"19. And he called the name of that place Bethel: but the name "of that city *was called* Luz at the first."

"22. And this stone, which I have set *for* a pillar, shall be God's "house: and of all that thou shalt give me I will surely give the "tenth unto thee."

I believe this chapter will be the concluding one.

From what I have collected it may be determined whether

The Thautawars are the descendants of a Celto Scythic ancestry who were either the aborigines of the plains of India, or a tribe of invaders from Central Asia: or

Are the Thautawars the posterity of a Buddh or Jain people.

Are the cairns the burial places of the ancestors of the Thautawars: or

Are they the cemeteries of a Buddhist or Jain people once established on the Neilgherries.

My view of the case stands thus, the Thautawars are the descendants of the aborigines of the plains who were Celto Scythians, and the tinge of Buddhism manifest in their religion and usages, as well as in the cairns and urns which I refer to the Thautawars, is to be ascribed to their contemporaneous existence with a race of Buddhists or Jains on these hills.

Additional Chapters.

Chapter 11th.

I am actuated to renew the subject of the foregoing chapters by some discoveries I have made, of more decided monuments of Druidism or Scythicism than any hitherto observed, and of ancient sculptures in the North-east angle of the Neilgherries. I say discoveries, because I cannot ascertain that any other person has previously taken notice of these interesting relics of past ages. But before I proceed to describe them, it is necessary to make some observations in elucidation of certain passages in my last papers.

I mentioned the existence of a tradition that the Pandaver once inhabited the Neilgherries. By the Pandaver I understand the Pandyan kings of Southern India, the country of the Pandyans being called Pandava: and I hazarded the conjecture that these Pandaver were either Buddhists or Jains. Kuna Pandya king of Pandava introduced the Jain religion into his empire, which included besides other districts Coimbatore, and therefore in all probability the Neilgherry Hills. The Jain image of Gomuta at Carculla, according to an inscription on the stone, was made by Vira Pandia. The Jain religion in former times was most widely spread in Lower India. The capital of the ancient Bellala dynasty had no less than seven hundred temples to Jaina in it. The same religion prevailed in Karnata and Kerala (Malabar). The Chola Rajahs were sometime Jains, indeed the Brahmins assert that this heresy was universally spread amongst kings and people before the advent of Rama Anuja A. D. 1000. The prevalence of the Jain religion in former times inclines me to think, that the mysterious Prester John or Prétre Jeán of our early travellers was no other than a Jain priest, whence Pretre Jain. Volney thinks he was a Buddhist priest and derives his name from Pretre Jhan, a compound of French and Persian words meaning priest of the world.

In a preceding Chapter I referred to *Pandoo and his children.* The Pandoos belong to the Brahmin age of heroes ; Dharma Rajah, the last of the five brothers, according to their accounts, died 4865 years ago. The Brahmins moreover state that the Tulava country over which they reigned became a state two thousand millions of years ago. The propriety of dismissing such fables is consequently obvious.

I now proceed to describe the

Antiquities at Achenny.

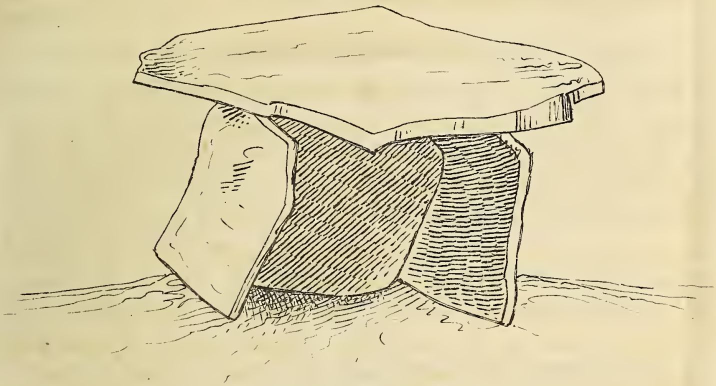
A village lying about three miles eastward of Kotagherry. At the extremity of a field beyond the village and overlooking a ravine, rises an artificial terrace twenty-one paces in length by ten in breadth, supported by slabs and masses of stone. Along the Western side of this platform I found a row of those remarkable relics of antiquity belonging essentially to the Druidical religion, called Cromlechs. There are twelve still standing, ten on the side of the terrace and two in the centre of it. The ruins of several others are apparent. Most of the entire ones consist of three upright slabs planted firmly in the earth and supporting a fourth, which is poised horizontally on the top of them. Four of the Cromlechs are larger than the rest, being about five feet square, and five high, the length of the upper slab measuring seven feet. The neighbouring villagers assured me no gentleman had previously taken notice of these relics, which may be accounted for by their having been almost wholly covered by underwood, which I was obliged to have removed before I could make my measurements and drawings. Inquiring of the people what they knew respecting these remarkable structures, I was told with much gravity they had been constructed by a race of beings not a foot high, who existed before mankind and were destroyed at a flood which overwhelmed the earth, an account remarkable as manifesting the universal belief in fairies, and important as exhibiting a tradition of the deluge amongst the lower orders of the Hindoo peasantry, who cannot have access to the Brahminical accounts of the Cataclysm.

The Cromlech is a vestige of antiquity well known in Europe, and is thus described by a modern writer.

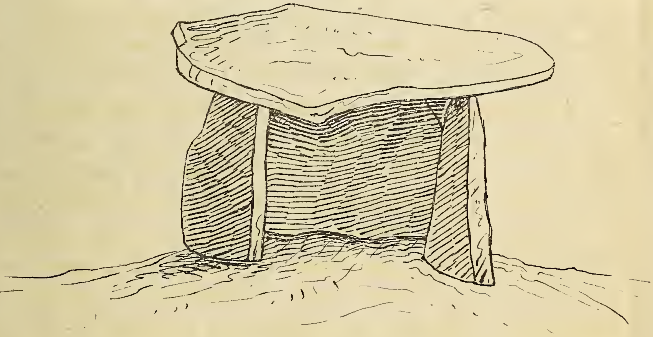
" Cromlech, literally stone table. Remarkable structures learnedly ascribed to the Druids ; unlearnedly to the dwarfs and fairies ; and numerous throughout Western Britanny. One or more large and massive flat stones overlaying great slabs planted edgeways in the ground, form a rude and sometimes very capacious chamber or grotto. The superstition which cleaves to these relics of a forgotten antiquity stamps itself in the names given to many of them by the peasantry. *Grotte aux fées*, *Roche aux fées*, *&c.*"

It is very remarkable that not only are the Cromlechs of the Neil-

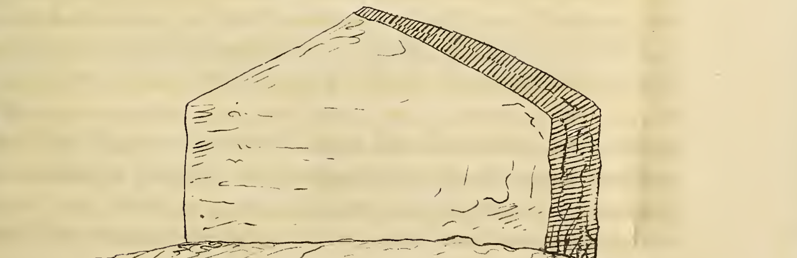
Gromlech at Achenny, Neilgherry Hills.



Compare with Kitts-coty house in Kent.



Upright Stone near Ootacamund.



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gherries *fac-similes* of those in Europe, but that the same legend is attached to both.

Cromlechs, found chiefly in Wales and Cornwall at home by antiquaries, are considered to have been altars used by the Druids upon which they kept the sacred fire constantly burning. The one perhaps best known is called Kits Cotty House, near Aylesford in Kent, and consists of three flat stones sustaining a fourth. A drawing of this Cromlech in my possession is an exact representation of one of the most conspicuous at Achenny on the Neilgherries.

By some the word Cromlech is derived from the Armoric term *crum*, meaning " crooked or bowing," and *leh* " stone," alluding to the reverence paid to them by bowing.

Mr. Rowland derives it from the Hebrew words *caremluach*, signifying a " devoted or consecrated stone."

The following is an account of some Cromlechs in the Isle of Anglesea.

" In the woods behind Plas Newydd near the Menai Strait are some very remarkable Druidical antiquities. Amongst them are two vast Cromlechs. The upper stone of one is twelve feet seven inches long, twelve broad, and four thick, supported by five tall stones. The other is but barely separated from the first ; is almost a square of five feet and a half, and supported by four stones. The number of supporters to Cromlechs is merely accidental, and depends on the size or form of the incumbent stone. These are the most magnificent we have, and the highest from the ground ; for a middle-sized horse may easily pass under the largest. In the lands of Llugwy, indeed, there is a most stupendous one of a rhomboidal form. The greatest diagonal is seventeen and a half feet, the lesser fifteen, and the thickness three feet nine inches, but its height from the ground is only two feet : it was supported by several stones. In the woods at this place are some Druidical circles nearly contiguous to each other."

It is very remarkable that the two largest Cromlechs at Achenny, like the ones above described, are " barely separated from each other."

At Trer Dryn in Anglesea " were also the relics of a circle of stones, with the Cromlech in the midst ; but all extremely imperfect. Two of the stones are very large ; one, which serves at present as part of the end of a house, is twelve feet seven inches high, and

eight broad; and another eleven feet high, and twenty-three feet in girth. Some lesser stones yet remain. This circle, when complete, was one of the temples of the Druids, in which their religious rites were performed.

Boddruddn, or the habitation of the Druids, Trer-Beirdd, or that of the bard, and Bodowyr, or that of the priests, are all of them hamlets, nearly surrounding the seat of the chief Druid, composing the essential part of his suite. At the last is a thick Cromlech, resting on three stones."

In describing the Cromlechs of Achenny, I have said that most of them consist of three upright slabs, planted firmly in the earth and supporting a fourth poised on the top of them horizontally.

Not to trespass on the matter of a paper in this Journal, relative to a Cromlech I found in the low country, I must omit making any more observations on the Cromlechs of Europe, but I have yet to describe a remarkable feature in those of the Neilgherries. Four upright stones of three Cromlechs have been converted into monuments by a people distinct from the constructors, and are covered with sculptures representing a triumphal procession. The monument of victory of the low country is an upright stone erected by some Hindoo prince to commemorate a victory gained on the spot, and is ornamented with sculptures and inscriptions. I could detect none of the latter in the present case.

The following is a description of

The Sculptures at Achenny.

First Stone.—There are four lines of figures upon the face of this stone, one over the other, twenty-four in number male and female; the former brandishing spears, swords and daggers—some have two swords, one in each hand; the females are represented dancing; halos cover the heads of many of the figures which are about eight inches high.

Second Stone.—The sculptures on this monument consist of three lines of figures nineteen in all, including two horsemen with drawn swords; in the second line is a male form dragging some quadruped along by a rope or chain; female figures also occur.

Third Stone.—There are two lines of figures on this monument, the males armed as above and their heads surmounted with high conical caps, they are placed in niches in the same manner as some of

Sculptures at Achenney, or Ujjeyini

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the sculptured figures in the caves of the Buddhists and on the temples of the Jains. I have taken a drawing of the sculptures of this stone as being the most characteristic.

Fourth Stone.—Has one line of three figures graven upon it, the centre is a male form dragging along or holding a horse, and his head is encircled with a glory.

When I recollect, the general opinion of the Thautawars being the aborigines of these hills; and that their religion is Scythicism, as well as their own tradition of having once been subjugated by foreigners; when I recall to mind the tradition of the Pandaver having in past times inhabited the Neilgherries; and that the nearest and most ancient road from the country of Pandya to the summit of the hills runs close by the village of Achenny where the Cromlechs stand; at the same time knowing that these structures must have belonged to a people whose religion was Scythicism or Druidism such as that of the Thautawars: I cannot dismiss the idea that, inspired by the proximity of their most holy temples and altars, the ancestors of this people here made a stand against the invaders but were defeated by them; and I believe that the Pandyan conquerors, who were Jains, desecrated the temples of the mountaineers by graving upon them a record of their victory.

I should observe that a resemblance subsists in many respects between the figures of the sculptured stones and the images in pottery found in the cairns of the " middle period."

Eastward two miles from the village of Achenny lies the ruined Fort of Adi-Raer-Cottay, situated on a small table land and sequestered by hills clothed with jungle. The position is strong, being nearly environed with a morass, and stream running along the channel of a deep fissure in the ground. The remains of the Fort indicate it was originally constructed of earth in some places, and in other parts of uncemented stones. In shape it is an oblong, the longer side measuring one hundred paces, the shorter fifty-three, and consisting of a double line of works one within the other, the space between the two occupying twenty-five paces in breadth. The remains of two square towers are visible adjoining the outer line, one seated on the west face and the other on the south; the gateway probably ran under the former.

Within the inner walls I found some remains of stone buildings, consisting of large blocks and flags unwrought, and two upon which

the marks of the chisel were apparent; their surfaces being smoothed and pierced by holes, which I apprehend served as sockets for pillars. Fragments of ornamented pottery were dispersed around. I observed several excavations in this part of the fortress, from which I suspect some curious person has been at work before me, and it is likely the fragments of pottery were thrown up in the course of his operations.

The native account of this place proclaims it was the work of a Rajah called Adi-Raer, who lived many centuries ago and built another fort, the ruins of which yet stand below, in the direction of Srimoga. Referring to a Rajah Paditti or Hindu list of the Pandya, Chola, and Chera kings, with corrected dates, I find that Adi-Raer flourished about the year 990 of our era, and I am inclined to think he was a Jain, from his name Adi, which is one of the appellatives of Jaina.

I think we may safely consider this king or one of his chiefs to have been the person who defeated the Thautawars at Achenny and established the dominion of the Pandyans over the Neilgherries, leaving a monument of his victory and of his religion wrought upon their altars—the Cromlechs at that place; and strengthening his conquest by the construction of the fort which bears his name.

If this be admitted, we have attained a very important *desideratum* in the history of the Thautawars, namely, the period at which they were subjugated, by the Pandyan invaders, apparently the latter end of the tenth century.

Six generations ago the forefathers of the Burghers and Lingayets, flying to these hills as an asylum, found protection from the Governor of this Fort who according to their account was himself a worshipper of Siva.

There are two other ancient Forts on the Hills: Gunganachiki Cottay, subsequently called Syudabad in the time of Tippoo, is near Coonoor. The other, Mulla Cottay near Sholoor, called Hooseinabad by Tippoo, I imagine was erected by the Pandyan conquerors of the Hills after their return to the worship of Siva, as a ruined temple at this fort contains images of Buswa, Ganesa, and Anumanta.

The discovery of the Cromlechs at Achenny excited in me the hope of finding some of those Druidical relics called by Antiquaries in Europe *Kistvaen* or "closed Cromlechs," frequently occurring in such parts of England and Wales as the Druids most favored. I

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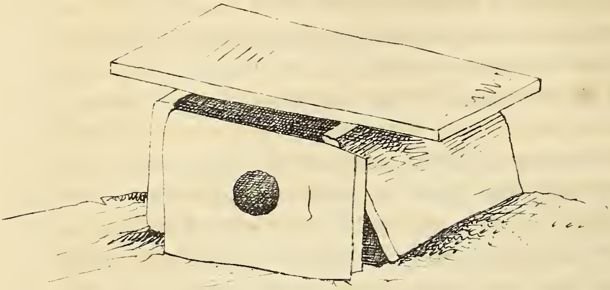
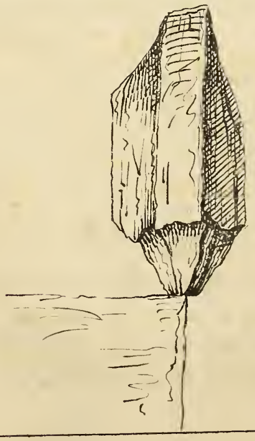
Closed Cromlech at Bellike, Neilgherries front view.



The same, side view.

Curious Tor near Bellike.



H. Congreve Dunphy, Lith

consequently made many inquiries of the Burghers and offered them rewards to show me any antiquities they were aware of in this locality. In the sequel I ascertained that about a mile beyond Adi-Raer-Cottay there were some stone edifices, ascribed by the Burghers to the former dwarf inhabitants of the hills, and after a little search in company with my informant I had the satisfaction to find a number of *Kistvaens*, concealed by trees, ferns, and high lemon grass, situated on a level in the slope of a hill rising out of a deep ravine. The *Kistvaens* were nearly buried in the vegetable soil, a fact, considering their height (five feet) that sufficiently attests the high antiquity which must be assigned to them. Where these structures occur in the low country, they are found on the summits or sides of rocky hills devoid of jungle, and hence appear in the state they were originally constructed, unencumbered with soil or rubbish. The Hindoos take no kind of interest in these structures; state that they know nothing about them except so much as relates to their erection by fairies, dwarfs or demons; and do not employ such mausoleums for the interment of their dead: from which considerations I believe the edifices to have been the work of the Celto-Scythic aborigines of the plains and mountains.

After removing a large slab five feet long, three broad, and one thick, which served as the roof of one of the closed Cromlechs, I proceeded to excavate the earth that had fallen inside, and reached the floor, another large flag eight feet long by six broad. Here I found fragments of clay vessels, probably remains of funeral urns. The chamber being cleared presented four walls, each consisting of an entire stone, and was seven feet long by five broad. The Monolithe constituting the eastern wall was pierced by a circular aperture about nine inches in diameter, adequate to admit the body of a child, who I conjecture was employed to place the urns inside.

Descending to the low country we find both kinds of *Cromlechs*, the open and closed, in different parts of the Peninsula. On the Coroomba or Mailgherry Hills, thirty miles south of Oosoor, several are standing, where I believe cairns similar to the Neilgherry ones may be found. At Naickenary on the top of the pass, some closed Cromlechs with a small circular aperture on one side may be seen. In Malabar near Ungadapoor and Mungary, that kind of Cromlech called Codaçul or umbrella-stone is found along with cairns. In South Coimbatore the Cromlechs and cairns are also found. I think I recollect having seen a Cromlech at Namun in Travancore, and an

account of a very remarkable one I found at Pallicondah near Vellore has appeared in a number of this Journal.* As we advance Northward, the Cromlechs are found in the forests of Orissa.

Lieutenant Kittoe, in the account of his journey through these forests, says:

"At this place (Goorsunk) I remarked a number of stones placed in the same manner as the Druidical monuments (such as the Kits-cotty house near Boxley in Kent): viz. three set upright, with one on the top of them, the dimensions of these are however very small, and have the appearance of a number of three legged stools. A custom prevails in these parts, of relatives collecting the ashes and bones of the deceased, and after burying them, placing stones over the spots in the manner above described."

Mr. Kittoe also says, he observed: "two heaps of stones each at the foot of a tree, which reminded me of the tumuli (cairns) the ancient Britons in the North of England used to construct over the graves of fallen warriors, on which each traveller used in olden times to throw a stone on passing by; upon inquiry I found that these were of the same nature, the like practice existing. Those which I allude to, are over the remains of two chiefs who fell in battle on the spot. I had often remarked similar tumuli in other parts of India."

The inhabitants of these parts are Gonds and Khonds, another remnant of the aborigines of India, and the fact of their having preserved the Cromlech and cairns, is an additional proof of the edifices of the kind I have prescribed having belonged to the aborigines, and of those on the Neilgherries being the altars of the ancient Thautawars, another family of the aborigines of the plains.

From my "Sketches of the Goomsoor war," published in the Asiatic Journal a year or two back, it will be seen that the Khonds had some customs similar to the Thautawars, such as

The former sacrifice of children.

The sacrifice of buffaloes at funerals.

The burning of the dead.

The want of respect for brahmins,

and some others hereafter to be noticed.

Speaking of Cromlechs, Mr. Rowland states his belief that they were originally tombs, and that in after times they were used as altars, sacrifices being performed upon them to the heroes deposited within. I rather regard them as having been originally altars and subsequent-

* Vol. XIII. Part ii. p. 47.

ly in some instances, tombs. Dr. Borlase and Wormius describe them as altars. I have no doubt however that the "closed Cromlech," or *Kistvaen*, of a chest-like figure, was a sepulchre, and I consider it the prototype of Sarcophagi and other Mausoleums of that description.

In Central Asia, beyond the Himalaya, Cromlechs and other Druidical relics exist. In China, the Americas, and in Europe they occur extensively: they are found in short in every region where the deviation from the primeval sacrifice by fire to the worship of the sun or fire, or Sabeism, took place amongst the early descendants of the sons of Noah, and from which perversion descended the various ancient religions I have previously mentioned, wherein fire, or the sun maintained the most conspicuous place.

Instead of Druidism being derived from Hindooism, as many suppose, I consider the greater antiquity must be assigned to the former, an opinion I am supported in by many learned men, and by the most ancient writers, who fix the adoption of Ionism or Hellenism, which is the deification of heroes and the worship of their images (for example Brahminism and Buddhism) as subsequent to what is called Scuthism, in which the sun, fire, or the elements, were regarded as typical of the deity but not actually worshipped. Scythicism connects Scuthism with Ionism, and is that form of religion in which the first step was made towards idolatry by the use of upright stones, &c.: it is the same with Druidism.

The following is an extract from Epiphanius upon this subject.

"The second is Scythism,* which prevailed from the days of Noah and thence downwards to the building of the Tower and Babylon, and for a few years subsequently to that time, that is to the days of Phalec and Ragau. But the nations which incline upon the borders of Europe continued addicted to the Scythic heresy, and the customs of the Scythians to the age of Thera, and afterwards; of this sect also were the Thracians."

Brahminism may be easily shown to belong to Ionism. AUM, the holy name of the Hindu Triad, is the same with AMUN, of the Theban Triad of Upper Egypt, and this Amun or Jupiter Ammon is the Hellenic perpetuation of Ham the son of Noah, and the ancestors of the Egyptians, whose son Misraim gave the name of Misr to that country, where it is preserved to this day. *Bramah* and *Ra-*

* Scythism is the same as Scuthism, and must not be confounded with Scythicism.

mah, two persons of the Hindu Trinity, are the Ionic or Hellenic representations of *Ramah* the grandson of Ham, one of the ancestors of the Hindus, while his brother *Sheba* is also remembered in their Trinity as *Seva.* The word *Vish-Nu* contains the remembrance of *Nu* or *Noah*, and is the same, I imagine, with Sisuthrus, the Chaldean name of Noah. The Avatar of the Tortoise obviously refers to the preservation of the Patriarch in the ark at the Deluge. In the Greek Mythology the remembrance of Noah is preserved in Saturn and Neptune. I am not aware that Sir William Jones in comparing the gods of India with those of Greece has drawn a parallel between Vishnu and Neptune, I shall therefore point out some affinities subsisting between them.

Kurma, the Tortoise Avatar of Vishnu, I conceive to be *Cromus* the son of Neptune, and Narayan, a name of Vishnu, means "Moving on the waters."

Several of the Avatars of Vishnu resemble the transformations of Neptune.

Matsya or the fish Avatar of Vishnu I believe to be the same as the Avatar of Neptune into a dolphin, to obtain the favours of Amphitrite.

Kalkee, the Avatar of Vishnu into a horse, reminds us of Neptune becoming a horse to enjoy the company of Ceres.

The amours of Vishnu as the naked *Buddha Avatara*, strongly resemble those of Neptune.

The third Avatar of Vishnu as *Varaha* the Boar, has a resemblance to the transformation of Neptune into a Ram to deceive Theophane.

I have a few more words to add respecting the Ionic remembrance of Ham in Egypt and India. The colossal statues of Memnon or Ammon in Egypt, sitting and upright, are remarkably similar to those of Buddha or Jaina, in whose names of

God A U M *a*
Got A U M *a*
G A U M *uta*
Maha A M U N *ee* (of Tibet) *i. e.*

The great Amun or Ammon, or Ham, the expression of both Hindus and Egyptians is maintained. The common Tamul name of God, *Saumy*, contains the holy name Aum.

The studious manner in which the Egyptians and Hindus have preserved the names of the progenitors of their race, in the names of kings

and men as well as of gods, is worthy of observation. The resemblance subsisting between the names of the ancient Egyptians and the Hindus is another striking proof of an identity which some still persist in doubting. I annex a list in illustration.

Names of the Egyptian Kings from Syncellus, Manetho, the old Egyptian Chronicle, Eusebius, &c.	*Hindoo Names.*	*Ancient Names preserved.*
Rhamessameno,	Ramasamee,	Rama.
Ramases,	Rama,	Rama.
Amenuph,	Munepah,	Phut.
Ammonophis,	Mahaammonee,	Ham or Ammon.
Chepren,	Curpen,	
Cetna,	Cistna,	Cush.
Chryses,	Chrysna,	
Chenchres,	Chenchee,	
Cheneres,	Cheneah,	Canaan.
Menes,	Meneapen,	Menes or Misraim.
Maris,	Maree,	
Venephes,	Venepen,	
Sebercheres,	Seva,	Shebah Sabtah.
Pheron,	Verapen,	
Thampthis,	Tamra,	
Apachnas,	Apasamee,	
Anoyphis,	Anasamee,	
Amenophis,	Menu or Menus,	Nu or Noah; or perhaps Menes.

Siris, *sris*, or *ses* is a common termination of Egyptian names; for example *Osinosiris*, *Osiris*, *Sisires*, *Sephres*, and it probably was used in a similar manner to the Hindu word *Saumy*, which concludes so many names. In Hindu literature *Sri* occurs as a title prefixed to the names of gods and kings, signifying, I believe, High, Bountiful, Mighty, Sacred, Holy, Great, &c. as well as salutation. According to Cassiodorus the inscriptions on the obelisks in Egypt were either in the Chaldaic character, or one closely resembling it. If not Chaldaic or Sanscrit, it was probably a sister character. The Sanscrit alphabet deprived of its ornaments, becomes the square character of Chaldea.

The name of Shem, Ham, and Japheth, are preserved with remarkable fidelity in the ancient books of the Hindus, originally brought from Egypt.

The Puranas contain much historical matter confirmative of the books of Moses; indeed we find some reference to the leading events therein recorded, such as the Creation of the World, the Deluge, the Confusion of Tongues, &c., in all ancient histories. In the Phœnician, Chaldean, Egyptian, and Greek accounts, these events are either described, or broadly alluded to.

Chapter 12th.

The great antiquity of the Thautawars and their claims to be considered the aborigines of the plains as well as of the hills, are further established in the fact, that a great number of the words in their language are etymons of the Tamul. To account for this I can only conceive, that the first Hindus adopted a large proportion of words from the aborigines, whence their language became a compound of what they brought with them as well as of the words of the Thautawars, &c.; for it is natural to suppose the Hindu invaders had some intercourse with the people they subjugated, a portion of whom acquiesced in the rule of the foreigners. Thus formed, the Tamul language might be compared with the tongue of our own country, which is a compound of the language of her ancient Saxon people and the Norman French of the conqueror.

The harsh words of the Indian aborigines were however softened by the more elegant and cultivated Hindus, into the liquid expressions now prevailing in their language.

If the derivation of the Tamul words from the Thautawar be not admitted, how are we to account for the fact of so many words being common to both tongues? to me it seems preposterous to suppose that a people of Scythian extraction settled in India before the Hindu eruption (for it has been seen that I have dismissed the idea of this being of subsequent date;) differing in every respect from the Hindus by whom they were conquered, and not even reverencing their priests; should have adopted the language of their oppressors. The experiment of forcing a language upon a people has generally failed; numerous examples of which are afforded in the pages of history.

Mr. Stevenson says there is a resemblance between the mountain tribe of Raj-Mahel (in the North of India where the Tamul is comparatively unknown) and the Khonds of Orissa, and the languages of both, as well as that of the Thautawars and other descendants of the

aborigines, have numerous words found in the Tamul and other tongues of the low country. Hamilton writes—" in this district (Raj-Mahel) there is a great extent of waste and mountainous territory, inhabited by a wild race of people extremely different from those of the plains, and apparently of an aboriginal stock." We are thus furnished with an additional proof that the various races of the mountaineers in India are branches from one aboriginal stock of the plains, from whom the first Hindu borrowed much of their language. That the Khonds and Thautawars are not of Hindu extraction is clear, in the fact of their sacrificing calves and buffaloes; such rites and the customs of infanticide being vestiges of Druidism, " though" says Mr. Stevenson " a few ideas may have been borrowed from the Hindus."

Figures of elephants, peacocks, fishes, and so forth are kept by the Khonds in their houses: these images strongly resemble what we find in the cairns on the Neilgherries.

I subjoin a few Thautawar and Tamul words in illustration.

Thautawar Etymons.	*Tamul Derivatives.*	*English.*
Modgh,	Moggul.	Clouds.
Meer,	Mire,	Hair.
Kuk, (girl)	Ukka,	Sister.
Kovil,	Veril,	Finger.
Voh,	Va,	Imperative Come.
Put,	Paity,	Fool.
Elp,	Elemboo,	Bones.
Kin,	Chinna,	Small.

In a former chapter, speaking of the Thautawar language, I suggested a comparison of it with the Celtic and Gothic tongues, for the following reasons.

In the remotest periods of the historical era a tribe of Scythians called Getæ, the same probably as the Massagetæ I have previously alluded to, inhabited a part of Central Asia. Some of their descendants under the same name located themselves in the regions overlooking the plains of India. In the same direction lay another Scythian tribe, who were Celts and from whom sprung the Parthians. I am induced to think that the first inhabitants of India were a mixed people from those races, and they entered it on the North-west. Epiphanius writes that the Thracians exercised the rites of Scythicism, and Strabo identifies the Thracians with a tribe of Getæ. Some of

the modern historical writers upon the successors of the Græco-Bactrian monarchs of Central Asia have bestowed upon the descendants of the later Getæ the appellation of Indo-Scythians. At a period subsequent to the conquests of Alexander the Great, a tribe of Getæ bearing the name of Gotœ or Goths migrated to Europe, and were the ancestors of one of the great German families. These Goths carried with them a language replete with ancient Persian words, which if not the Pahlevi, was at any rate a sister tongue; whence we find so many words of Persian origin in the German language. The god of these Goths at that time was Woden, whose resemblance to Buddha is so great as to have induced many antiquaries to identify them. The learned Mr. Schmid wrote a paper in the Madras Journal, contributing to prove that some of the ancestors of the Germans, the same as the Scandinavian Goths, were Buddhists. The celebrated modern Hungarian traveller, Khosma-de-Koros, was so persuaded that the ancestors of his countrymen (Slavonic Scythians) were Buddhists, that he travelled into Central Asia on purpose to confirm his opinions. The discoveries of Lieutenant Pigou in the caves of Bahrabad in Affghanistan, indicate that Buddhism prevailed so far Westward in Asia as the country of the Indo-Scythians, and we know how extensively it has been diffused to the North and East of the Himalayah.

The Wednesday or Wodensday of the Goths, corresponds with the Puddovam or day of Buddn of the Thautawars.

The Thautawar week consists of eight days, which was also the case amongst the ancestors of the Germans.

The name of the Thautawar temple near Picarra is called Godimana, which may be read God-i-mund, or Got-i-mund, *i. e.* the place of God or Got (Gothic); mund being the Thautawar name of a village or place. Godimana or Gotimana, a name of Buddha, was probably carried by the Goths into Europe, and from it they derived the name of the deity—Got or God.

To any one entertaining the belief that the advent of the Thautawars was subsequent to that of the Hindus, all this would present a strong temptation for not only conceiving that the ancestors of the Thautawars were connected with the Getæ or Goths, but also that the tinge of Buddhism was acquired by them before they migrated to India. But as I have relinquished this theory, and am now more

than ever satisfied that the ancestors of the Thautawars were the Celto-Scythian aborigines of the plains, to persist in it would involve an unpardonable anachronism, as it would be tantamount to asserting that Buddhism prevailed in Central Asia before the Hindus invaded India. I therefore adhere to the opinion I formed, relative to the early Thautawars having engrafted upon their Scythic ceremonies some of the rites of the Buddhists or Jains who were once on these Hills; and I no longer insist upon my statement that in the Buddha or Godama of the invaders "*the Thautawars would discover*" the Woden of the Scythians; nevertheless I shall retain my comparisons of the customs of the Thautawars with the Scythians of the "middle ages" of Asia, it being reasonable to suppose that they very little differed from those of the earliest Scythians.

That the idea of the Thautawars having borrowed certain ceremonies from the cotemporary Buddhists may not seem extravagant, I cite a passage from Masson, from which it will appear that the disciples of the Mithraic religion, a form of Scythicism, were not indisposed to blend Buddhism with their more ancient doctrines.

"It may be observed that the later antiquities in Affghanistan and the Punjaub, or in the countries along the course of the Indus, are apparently mixed Mithraic and Buddhist; nor is it improbable that the two systems, if they were really generically distinct ones, should have been blended in the limits to which both extended, and were both met."

The extent to which the Getæ spread, viz. from the confines of India to those of Europe; the fact that in the earliest times they professed Scythicism; the resemblance between the Thautawars and the ancient Goths in some respects; and the certainty that the aborigines of India were a Scythian race—Celto-Scythic: still render a comparison between the Thautawar language and that of the Goths as well as of the Celts, a *desideratum*, which I shall endeavour to accomplish. Meanwhile I collate some

Thautawar Words	*with*	*Words of Western Languages.*
Tiggal, (moon)		Gallach, (Celtic.)
Vejun or Vejusn, (wife)		Venus from ben, and jus, (Celtic for woman.)
Hurs,		House.
Moh, (man)		Mahen, (German.)

Thautawar Words	*with* *Words of Western Languages.*
Err, (buffaloe)	Edra, (milking time in Celtic.)
Trooda, (eldest brother)	Brooder, (Gothic.)
Phin, (chatty or pot)	Pan (English.)
Got or God, { a mund, (the place of God,) }	Got or God.
On, (1)	One.
Adjou,	You.
Ther, (God)	Thor, (Gothic.)
Ait, (eight)	Eight.
Unnoo,	Hundred.
Aitnor, (a week of 8 days,)	The Gothic week consists of eight days.
Buddovum, (Wednesday)	Wodensday.
Tor—l (mountain)	Tor.

I have dismissed the idea of the ancestors of the Thautawars being unacquainted with the Buddha of Central Asia, on the ground that Hindooism (properly so called) is more ancient than Buddhism. Future discoveries may however prove that one is as old as the other. One of the analogues of Buddha is Toth of the Egyptians, the Mercury of the Greeks, but who really was Athothes the son of Menes by whom the Egyptian monarchy was founded 2188 years before Christ. And it derives great support from the statues of Buddha, which are precisely those of Memnon in Egypt, having the African features and woolly hair of some of the ancient Egyptians. Moreover the name of Buddha in Siam is Pout, the same, I have no doubt, with Phut of Scripture, the brother of Menes or Misraim of Egypt, the son of Ham. If we correct the old Egyptian Chronicle by the Book of Moses, and substitute the word *brother* for *son*, we arrive at the conclusion that,

Buddha or Phout is Phut, who is Toth, who is Athothes, who reigned in Egypt 2000 years before Christ.

Sir William Jones conceives Buddha lived 1027 years before Christ; Abul Fazl 1366; while other accounts speak of a second Buddha who appeared in the sixth century before Christ, and was probably the individual venerated by the Goths as Woden.

That the Buddhists' conceptions of the names of their forefathers are as accurate as that of the Hindus will be obvious, in the following

table of the names of their god, wherein they have preserved the memory of their progenitors.

Names of the Buddhist and Jain God.	*Countries.*	*Ancient names of the family of Ham preserved.*
Mahaammonnee,	Tibet,	Ham.
Pout,	Siam,	Phut.
Saka,	Chinese,	Cush.
Chaka,	Tonquin,	Cush.
Godama,	Ava and India,	Ham.

In pointing out the features of resemblance subsisting between the Goths and Buddhists, I omitted to mention that in the niches, long pointed arches, and general style of the Buddhist and Jain architecture, might be traced the origin of the Gothic architecture of Europe.

Chapter 13th.

The surface of the Neilgherries may be separated into three regions, viz. the Alpine or Mountainous; the middle or cultivated; and the precipitous or region of precipices and waterfalls. As the antiquary prosecutes his investigations amidst remains precisely similar to those in England, he is constantly reminded by other objects surrounding him of his own old land. The middle region, is perhaps the most picturesque, embracing as it does views of the other two, and extensive prospects of the low country. From this region, on one side the spurs of the centre mountain rise up loftily, presenting the wild and grand scenery peculiar to Alpine countries. In the opposite direction the broad vallies of the middle region, (occasionally varied in character by the English cottage of some planter with its stack of chimnies,) abruptly terminate in precipices, and narrow terraces supported by clifts of vast altitude. As you cross the fields of golden barley waving in the breeze, you hear the lark singing as blithely overhead as he does above the wheat fields of England, or you see the wren, or the old black bird in his sable suit, winging his way to some neighbouring coppice skirting the fields, and as clearly defined as the hazle woods at home. Reaching the rugged tracts at the margin of the agricultural district, you shortly find yourself in the midst of luxuriant ferns interwoven with the wild eglantine, the black-berry and wild raspberry. Further on a terrace is reached, green with moss and variegated with wild flowers resembling the blue bell, buttercup, violet, daisy and other flowers of your native land. On such

a lawn as this may stand, an ancient Cromlech or Druidical ring, to complete the illusion you have fallen into that you are actually exploring the antiquities of England or Wales. The happy dream is however but momentary; altering your position, it is at once dispelled, and you are restored to the consciousness of being still in India, by the prospect of the plains of Coimbatore or Mysore spreading far and wide below you.

One of the most attractive spots in the region of precipices is Saint Catherine's Fall, about four miles South East of Kotagherry. At this place the bed of a stream which has descended hitherto with but a gentle inclination, grows narrower and is suddenly interrupted by a deep chasm, into which the waters leap from the crest of a precipice. To obtain a full view of the Fall, it is necessary to descend the almost upright bank of the ravine, which is accomplished by the aid of overhanging trees, and roots in the soil. Reaching the foot of the Fall you are amply repaid for the trouble of the descent, in the prospect of a stately column of water, upwards of 200 feet high, descending in front of you, amidst scenery of the most stupendous character. This Fall will not however bear comparison with the lower falls of Papanassum and Courtallum, being less voluminous than either. It more resembles the upper or first Fall of Courtallum, which, as those who have visited that Oasis of the south part of our Presidency, will remember, is lofty and occupies the breadth of a ravine. The interest I took in Saint Catherine's Fall was greatly enhanced by a statement of my guide, subsequently corroborated by the testimony of the neighbouring Burghers. He said that on a ledge or platform in the side of the cliff above us, and overlooking the waterfall, was a stone perforated with a cylindrical hole, and related a marvellous story of an elephant having been chained to the stone by means of the hole, and forced to occupy the rocky platform by its owner, in the days of the Pandaver. Although unable to satisfy myself of the existence of the perforated stone, from the united evidence of the Natives I have no doubt it actually exists; and dismissing the tradition I believe the stone is in reality,

A Tolmen

or "hole of stone," as its name imports literally, and which is another relic of the Druidical religion. The Tolmen of England was either an immense stone balanced on the points of a rock, so as to

admit the body of a child; or it was a rock with a passage bored through. Not long ago, in some parts of Cornwall, children afflicted with weakness in their limbs were passed through the holes of a Tolmen, and it was thought great benefits were produced thereby. In the Scilly Islands there are two Tolmens. In the tenement of Meu, in the parish of Constantine, Cornwall, is perhaps the most remarkable one we can boast of. It seems to me by no means unlikely that the aperture of the Tolmen was also employed as an oracle by the Druids, who acted in the same manner as the *Pythia* seated on a *tripus* at the mouth of the cavern of Delphi on mount Parnassus, where she was wont to deliver the answers of that oracle sacred to Apollo, who was also the god of the Druids. The oracle of Trophonius at Lebadea, a city of Bæotia, also consisted of a hole under ground from which the responses were delivered.

In the neighbourhood of the Fall, close to the ruins of some Thautawar villages, is a group of three Cromlechs, and a vast mound or cairn of stones. Three miles North East of this spot I discovered two other Cromlechs. The very sequestered position of the latter reminded me of the name bestowed, in the Northern countries of our quarter of the globe, upon the Cromlechs, where they are called "Blod," that is Bloodstones, in allusion to the sacrifices of human beings once performed upon them; and I could not refrain from associating the existence of these altars on the Neilgherries, with the former sacrifices of children by the Thautawars.

On the side of a hill marked by a high tree on the summit, on the right hand side of the road just before entering Kotagherry from Ootacamund, there is a curious seat formed from a mass of rock by the hand of nature: I have called it "the Druid's chair," its shape being that exactly, having a seat back and two arms. It nearly faces a house known as the wilderness in Kotagherry, from which it is separated by a deep valley. The Druid's chair commands the best prospect of Kotagherry I have yet seen, and it often reminded me of the accounts I had read of the Warden's chair, juror's seats, and table hewn out of the rough moor stone, at Croken Tor at Dartmoor.

There is not a relic of Druidism existing in England the type of which I have not found on these hills. In the rocky channel of the river I have just spoken of,

Rock Basins

have been excavated. Dr. Borlase considers the rock basins of Cornwall and Devonshire the work of the Druids, and used by them for the purpose of lustration. Geologists however consider them as the result of the action of eddies of waters in which pebbles are suspended ; in this latter view I cannot concur, because I have frequently observed Rock basins in places over which no stream has ever passed, and within the last few days I have seen one of these excavations on the surface of a rock, in a ravine far above the scope of the water at its highest rise.

The last relic of Druidism existing on the Neilgherries which I shall have perhaps to describe, is a Tor near Bellike, called by the Natives *Pipacul* or barrel-stone, from its resemblance. As usual they have attached some wonderful story to this uncommon object, asserting it marks the spot where a giant or Raksi buried his treasure. This stone is about ten feet high and four feet in diameter at its thickest part, from which it tapers barrel shape to its ends, which are planes. It rests upon and projects over the point of another rock. A diversity of opinion exists regarding the origin of Tors and Logan stones, Geologists declaring they are due to the decomposition of the rock, while antiquaries maintain they were wrought by the ancient Britons for the uses of priestcraft. I think an opinion embracing portions of both would be the just one, and I am disposed to consider the Logan stones in most instances the result of natural exfoliation in the stones, and that the Druids—aware of the effects produced in the minds of the vulgar by any natural phenomena or object of unusual occurrence—rendered the Tors and Logan stones subservient to the purposes of their superstition.

Chapter 14th.

Seeking for fresh evidence of a Buddhist or Jain people having formerly inhabited the Neilgherries I have collected the following.

1. The Burghers relate a tradition to the following effect. Many centuries ago a race of people called Mauryas flourished here who were the creators of all animals ; and were subsequently destroyed by a shower of fire and mud from heaven. The interpretation of the tradition I make thus. Maurya was the family name of the celebrat-

ed dynasty of Indian kings whose dominion extended nearly over the whole Peninsula. Chandragupta or Sandracottus who confronted Alexander the Great was the founder of this dynasty. He was succeeded by Varisara, and he by Asoka of the same line whose capital was Palibothra. He was the great Buddhist king of India whose rock edicts at Girnar and Cuttack have created so much interest amongst our Indian antiquaries. These edicts contain a prohibition against the destruction of animal life, and publish ordinances for the construction of hospitals or asylums in which men and every kind of living creature were to be provided for. In this singular law I trace the origin of that part of the Burgher tradition relating to the Mauryas having created all kinds of animals. With respect to the destruction of the Mauryas by fire and mud it is clearly the same as the tradition preserved amongst the Mackenzie Manuscripts (vide Rev. William Taylor's Report: A:—Tamil, Palm-leaf M. S. S. No. 165, Countermark 64, marked *Chola purva Patayam.* Madras Journal, April, 1838). This account states that at the commencement of the Salivahanam era, (1st century A. D.) the great Samana or Jain king destroyed the sacred edifices of the Hindus and oppressed all who would not become converts to his religion. At length Siva moved by the complaints of his people sent a shower of fire and mud upon the Jainas. Whether the tradition about the Mauryas on the Neilgherries relates particularly to the kings of that race, or whether the expression Maurya is now used by the Hindus to designate any Buddhist or Jain people, I am unable to determine. If the latter be the case it furnishes fresh proof of my conjecture respecting Adi-Raer the Pandyan king being a Jaina and the first conqueror of the Thautawars. On the other hand is the statement of a Burgher that the Mauryas were here 2000 years ago, which is about the time that Asoka the Buddhist king of India flourished.

Referring to the Puranic lists of kings I find that the Maurya race terminated with Vrihadratha who was succeeded by the Sunga kings the second of whom is called Agnimitra. Agnimitra seems to be compounded of two words signifying fire and mud, and in this name of one of the foreign successors and perhaps usurpers of the Maurya dynasty we may trace the origin of the foregoing fable respecting the Buddhists or Jains having been visited with a shower of fire and mud.

2. I have recently found some inscriptions on a rock, one of which is in a character resembling as nearly as possible the inscriptions at Junagarah which are but one remove from the Buddhist alphabet at Girnar. It also resembles the Buddhist inscriptions in the caves of Western India. The rocks on which the inscriptions occur on the Neilgherries are at Bellike. The Rev. Mr. Weigle has also taken a copy of these inscriptions. I shall presently make further mention of them.

3. A gentleman long resident on the Hills has informed me that formerly when exploring the jungles of the Neilgherries for game, he often used to find upright stones, some bearing mixed inscriptions of Jain and Canarese. He states also he believes these upright stones in many cases were the boundary marks of villages when the Hills were much more peopled than at present; and adds the remains of old wells have been found, and an iron *pukotta* bucket similar to those used at this day on the plains.

4. At the foot of this chapter I shall present a list of some of the Buddhist or Jain images found by me in the cairns, and point out how strongly they resemble those occurring in the Buddhist caves. The contents of the caves and topes of the Buddhists in Affghanistan consist of vases, crystal beads, &c. which it will be recollected I have described as being some of the things found in the Neilgherry cairns.

5. The images in pottery of warriors on horseback and on foot deposited by the Lingayets at their Saumy houses on the Hills, in obedience to a vow made during sickness; have been fashioned in adherence to the costume and arms of the former great rulers who lived here. The busts and heads of these images strongly resemble the heads on the coins of the Saurashtra dynasty, of whom king Rudra was in part a Buddhist. In both cases the heads are surmounted by an iron morion or scull-cap with a broad rim, the neck ornaments too are identical; indeed the resemblance extends to the cast of features. It is difficult to account for this fact, unless we suppose that amongst the natives are preserved drawings of the costumes of the former inhabitants, or that the potter from generation to generation has copied the clay figures deposited at the Saumy houses, by which process the same character has been preserved from immemorial times.

In directing the attention of the curious visitor to the antiquities in the neighbourhood of Kotagherry, I must not overlook the caves of

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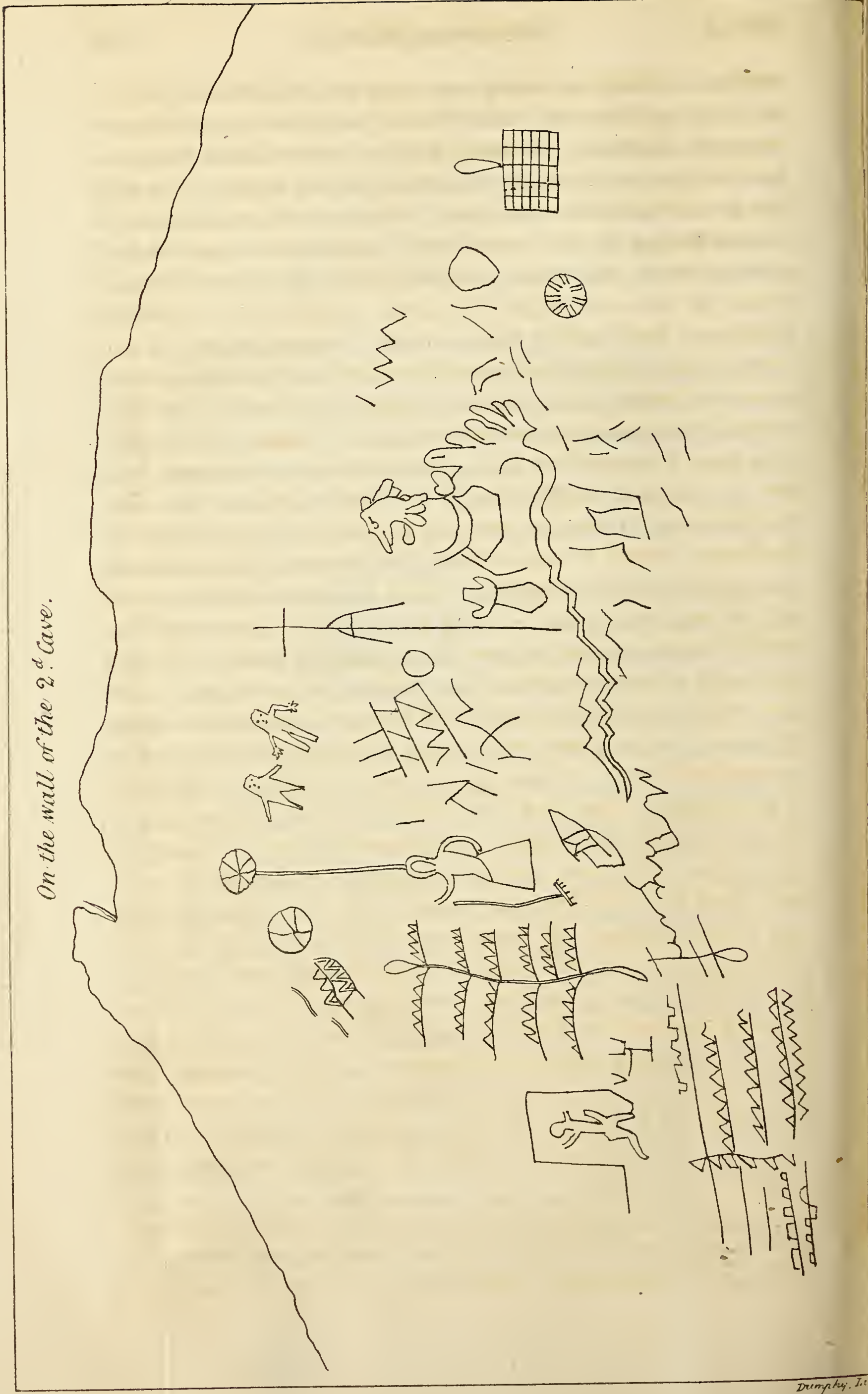

On the wall of the 2d. Cave.

H. Congreve Dumphy. L.

Bellike. Although possessing none of the features of interest belonging to the cave temples in the West of India, they are nevertheless worthy of observation. Formed by rocks projecting from the mountain side, the two caves are the work of nature, though the hand of man has increased their dimensions. The first is known as the cave of Mahmurpullum or the "mango tree," deriving this name from a grove of large wild mango trees adjoining. It is about 30 paces broad, 12 deep and 20 feet high at the entrance, the roof sloping downwards inside until it joins the floor. Several smaller caverns branch from the outer cave, most of which are now filled up by loose stones and trunks of trees, the performance, I conjecture, of the Corumbas who occasionally use this as a place of sacrifice and poojah. In a recess I observed the lair of a bear, whom as I approached the cave I disturbed while feeding a few yards from it. On other thoughts intent I was not prepared to send him to sleep with his forefathers, though I have no doubt this intimation will commit his existence to the tender mercies of some Neilgherry hunter; indeed my rifle supplied me with so many bear skins in Goomsoor that my predilection for this kind of sport has considerably abated. The roof and *façade* of the cave present the remains of old paintings of armed men, men on horseback, animals and demons, so rudely executed as to render it as likely they are the wcrk of the Corumbas as of a more accomplished people. Some suppose this and the other cave presently to be described to have been the hiding places of a Polygar chief of the Fort of Adi-Raer Cottay when pursued by some of Hyder Ally's troops. This same chief is erroneously thought by them to have been the Adi-Raer who founded the Fort. The Monegar and other inhabitants of Conagherry assured me, Adi-Raer the founder of the Fort lived many generations ago, they could not say exactly how many, but knew it was upwards of fifteen; moreover the early Burghers and Lingayets came to these hills at the invitation of a chief occupying the Fort 300 years ago. All the natives in the neighbourhood declare their conviction that Adi-Raer was a great Rajah and not a Polygar chieftain. I think it probable the caves may have been used as cave temples by the early Buddhist or Jain inhabitants of the hills.

To reach the second cave it is necessary to proceed in the first instance to Arrawaddy two miles below Conagherry, and procure the services of Corumba guides, the route being so intricate and embar-

rassed with high grass and jungle as to render the attendance of some one thoroughly acquainted with it indispensable. My pioneers were compelled occasionally to cut a way through the obstacles that grew around us, and which had in many places wholly obliterated the path. From Arrawaddy the journey must be performed on foot as you have to descend the declivity of a deep ravine, cross its channel by stepping from rock to rock, and then ascend the farther bank of it in which the cave is situated. On my way up I passed an old circular wall that had once formed the outlines of a temple, perhaps a Betta or open temple of the Jains, or a Druidical enclosure. The Corumbas knew nothing of its origin. On reaching the cave I proceeded to measure, and found its depth thirteen yards, its breadth six, and the height of its entrance forty feet, the roof sloping downwards till it meets the inner wall five feet high. The rock in which this cave is situated is perforated with several passages intersecting each other and connecting the interior of the cave with the flat surface above it.

I explored these passages but found nothing except an old iron ring. The sides of the large cave were marked with outline intaglio figures, and what were perhaps once in inscriptions now so defaced as almost to defy an attempt to copy them. I however contrived to transfer the more legible to paper. On the left side of the cave are the following intaglio cuttings in the rudest style.

A human figure having the head of a bird with its waist encircled by the fold of a snake, seemingly expanding and raising its seven heads behind the figure. In front of this human figure is a symbol having some resemblance to one of the Buddhist symbols mentioned by Colonel Sykes. The seven hooded snake is frequently seen accompanying images and drawings of Buddha. To the proper left of the figure is, what I take to be, another Buddhist or Jain symbol of a gridiron form with a handle above it. To the right of the large figure and snake, is the rude effigy of a human being from whose head rises a long shaft surmounted by a chuckrum or a lotus. To the left of this emblem are two forms like demons. There is a Buddhist symbol not unlike these. The same figure which seems to be balancing the chuckrum has a broom in its hand, which it will be recollected is one of the symbols of office of the Jaina priests who use it to sweep insects out of their way for fear of treading upon them. In front of the figure of the Jaina priest is a tree. Below this a

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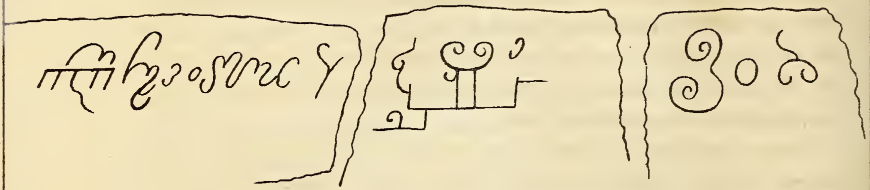
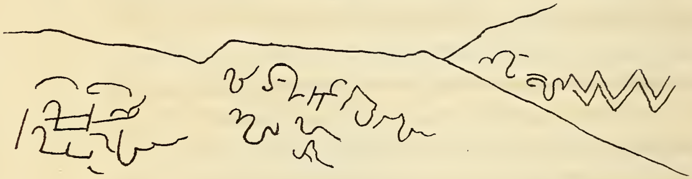
Inscription on a rock at Bellike.

On the surface of the same rock.

On another rock

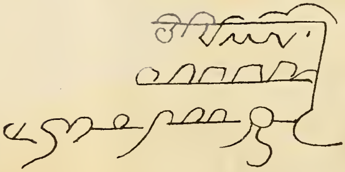


Marks or characters on left side of entrance of large Cave.



Right side of entrance of the same Cave.

At the foot of the figures on the large Cave.



H Congreve. Dumphy, Lith.

figure kneeling and apparently intended to be placed in a square niche. There are numerous cuttings of chuckrums and other devices about this part of the cave which my sketches can alone convey an idea of. At the bottom of the left hand side wall of the cave are some characters not unlike the old Pali. Near the floor on the right side of the entrance are some other characters. Near the floor on the left side of the entrance are more characters. I copied all these as well as I could decypher them.

Returning from the caves I copied the rock inscriptions in the Bellike valley. There are three. One is in old Canarese and means Lingum. This is on a rock on the south boundary of a tract cultivated by the Burghers and where they say in former days stood a large place, bazaar and gardens.

The second inscription is in a character resembling the old Malialum.

The third inscription resembles the old Sanscrit of the 3rd century before Christ, and the Junagarah inscriptions I have already alluded to. It consists of but one line.

Mr. Weigle suggests that the proper reading of the name of Achenny may be Ujayini the same as Oojain. I am well disposed to agree with him because it would greatly confirm my conjecture that the Buddhist or Jain conquerors of the Hills won their first battle at the spot, nothing being more likely than that they would bestow upon it the name of their capital Oojain or Ujayina, also one of their original seats.

The Editor of the Madras Journal in his Review of the Mahawanso states his belief that Buddhism spread to Talcad the ancient capital of the Conga country or modern Coimbatore, and adds, the Jaina faith was once seated on the throne of Mysore, and materials exist to show Buddhism came over from Ceylon into the Pandiya and Chola countries, or the districts surrounding Tanjore, Trichinopoly and Madura.

List of Figures, &c. in pottery from the cairns on the Neilgherries, of Buddhist or Jain fashion.

1. Figures of lions, tigers, deer, peacocks, which are of common occurrence in Buddhist paintings and sculpture.

2. Figures of coiled snakes.

3. Figures of the cobracapello with its hood expanded.

4. Animals enveloped in folds of snakes.

5. Figures of elephants.

6. Figures of human beings riding on elephants.

7. Figures of human beings enfolded by snakes, and in the clutches of tigers.

8. Figures of armed horsemen.

9. Two figures bestriding one horse.

10. Figure of Godama in a sitting posture, leaves of the Ruttimully plant covering his waist, arms and thighs.

11. Figure of Godama having the placid expression of the Egyptian Memnon.

12. Human figures with hair brought to a point behind the head.

13. Figures wearing a conical cap.

14. Chuttries forming handles to urns.

15. Urns of Buddhist or Jain fashion.

16. Double-headed snakes forming handles to urns.

17. Human figures whose heads are surmounted by tiaras like the sculptures in the Western caves.

18. Human beings playing on small drums, horns, &c.

19. Animals with bells round their necks.

Chapter 15th.

A person standing on the ridge behind the traveller's bungalow at Coonoor might discern with a telescope the battlements of an ancient fortress crowning the summit of the precipitous mass of rock facing Coonoor in a south direction, and separated from it by the deep ravine along the left bank of which the high road descends to Metapollium. A melancholy interest attaches to this fortress rumour assigning it as one of the places of confinement of Tippoo's English prisoners, some of whom are supposed to have been destroyed by being flung over the precipices which guard the Fort. Amongst the Burghers this place is called the Droog Hill, it is also known as Syndabad and Goganachiki Cottay; but the people of the low country call it Pukasooren mullay; the inhabitants of Metapollium, Nellathoray, and other places in the plains at its foot, regard it as the scene of one of the Hindu legends. Once upon a time, say they, the Fort at the top of the Hill was inhabited by its founder a giant or raksi called Pukasooren, who was accustomed to levy a tribute from the people of the country lying beneath him, consisting of a cart load of provi-

sions daily. After he had devoured the impost, he swallowed the driver, so runs the story, and then with a kick sent the cart back again to bring him a fresh supply the next day. Beeman one of the five Pandoos (the king Arthur of Hindoo romance) travelling in this part of the country came to Moonoor munglum formerly a large city, the ruins of which the natives assert may still be seen on the bank of the river opposite to Metapollium. Struck with the desolate aspect of every thing around him and the sad looks of the inhabitants he inquired into the cause, and resolved to convey himself to the giant the bandy load of provisions, but on the way growing hungry he was fain to appropriate them to his own use. Then substituting mud for the provisions he drove the cart to the Fort. Pukasooren directly he saw what had been brought to him fell upon Beeman, who after a hard contest slew the giant, but not before the latter had pronounced a curse upon the whole face of the country over which the shadow of his mountain fell during the day, to the effect that it should be always afflicted with a deadly fever, which, say the natives, has happened ever since.

On hearing this story related, it occurred to me that the raksi of the legend was in reality some Buddhist or Jain chief whom the Hindus had identified with an evil personage out of one of their books, to render his memory more infamous, and in conformity with their custom of calling the ancient Buddhists raksies or giants, and demons, Ravannah the Buddhist leader of the expedition from Ceylon to India being considered the king of them. I therefore resolved to pay a visit to the Fort, in the hope I might discover something to confirm my conjecture. Starting in the morning I crossed the deep ravine, and two others tributary to it, at a point half way between Coonoor and Cartary, reaching Hoolicul about eight o'clock. This village derives its name from the circumstance of a chief having in former days slain a tiger here, and set up a sculptured stone to commemorate his exploit. The present inhabitants were unable to show me this relic of antiquity. A remarkable custom prevails amongst the Burgher inhabitants of this, and probably of all parts of the Hills, "it being customary for one who is in want of labourers to promise his daughter in marriage to the son, or other relative of a neighbour, not in circumstances so flourishing as himself; and these engagements entered into, the intended bridegroom serves

the father of his betrothed, as one of his own family, till the girl comes of age, when the marriage is consummated, and he becomes a partner in the general property of the family of his father-in-law." This custom calls to mind the marriage, and conditions of it, of Jacob with Rachel, thus narrated in Scripture.

Verse 15. "And Laban said unto Jacob, because thou art my brother, shouldest thou therefore serve me for nought? tell me, what shall thy wages be?

18. "And Jacob loved Rachel; and said, I will serve thee seven years for Rachel thy younger daughter.

20. "And Jacob served seven years for Rachel; and they seemed unto him but a few days, for the love he had to her."—*Genesis* XXXI. *Chapter.*

From Hoolicul I went Eastward four miles to Kercottah, near which Captain Lucas has erected a hunting lodge, on one of the most charming spots the imagination can conceive. Seated on the very brink of the Coonoor ravine it commands an extensive prospect of Doda betta and other upland scenery of the Neilgherries, Coonoor being immediately in front beyond the ravine and not a mile away; while to the right the eye may range along the chasm taking in views of the ridges which terminate below Kotagherry and descend abruptly upon the plains. At night the fires in different villages of the low country may be distinctly seen, and the furnace of some potter on the very edge of the horizon mistaken for a star. Notwithstanding the assurances of the inhabitants of Kercottah that no antiquities existed in their neighbourhood, I explored it, and found three Cromlech on the hill above Captain Lucas's lodge. From Kercottah the route now led through a forest for about two miles, we then reached the fort without having experienced any of the obstacles in shape of precipices or ravines I had been led to expect; indeed this side of the position is comparatively so weak that the Mussalmen governors of the Fort in Tippoo's time strengthened its defences by embrazing and loopholing the wall to which they also added a banquette. Entering the Fort by a gap in the wall I found the interior entirely overgrown with jungle, though not so much as to hide the ruins of many old walls, and the remains of a hut, pointed out as the place where a Mahomedan Fakeer stayed for some days four years ago. I traced the contour of the fortress, consisting of a wall five feet thick for the most part, though of various heights, and constructed of

stones cemented with mud. It ran close along the margin of the precipices which bound three sides of the mountain, being strengthened by projections where a ridge, or place for the foot of an assailant, attempting a surprise, occurred. I should say the length of the Fort is between five and six hundred yards, its breadth varying from one to two hundred, though I made no actual measurements. As may be conceived the view from this elevated position is very extensive and remarkably beautiful.

Having found nothing to corroborate my suspicion that the Fort owed its origin to the Buddhists, I returned to Coonoor, marking several cairns for future operations. The next day I rode over to a valley beyond Hoolicul in quest of some *shelliculs* or sculptured stones which I was told would be found there, but on this occasion I was doomed to disappointment, having searched for them in vain, through the day, over hills and dales covered with high grass. I observed, however, on the rocky surface of a hill, some very small Cromlechs about a foot high, associated with slabs fixed upright in fissures of the rock.

I made a wide circuit, as I returned to Coonoor, passing by Cartary and admiring its beautiful waterfall, and struck the high road at Aravancad.

During my stay at Coonoor, I opened the cairns between Kercottah and Hoolicul, and others between Coonoor and Aravancad; being of the earliest period they did not prove prolific. The last I opened made the forty-sixth I have excavated on the Neilgherries, and strange to say without discovering a single coin, or inscription in them. The only coin I have heard of, as having been found in a cairn, was a Roman *Aureus*. In the low country where cairns have been opened Roman coins in a high state of preservation were found, accompanied by short bladed swords, and black glazed porcelain jars, of very classical forms.

About forty-five years ago in the vicinity of Palachy in the Coimbatore district, was dug up a pot of Roman coins consisting of two kinds, namely, Augustus and Tiberius. On the exergue of the former the word Cæsarea indicated the place where they had been struck. It is a matter of history that one of the Pandyan kings sent an embassy to Augustus whom they found at Samos. This might countenance an idea that the urn containing the coins was a part of the valuables with which the Pandyans returned to their native country.

Lieutenant Newbold not long ago read a paper before the Royal Society on a pot of coins subsequently discovered in the same district. These with other Roman coins occasionally discovered may have found their way into Pandaver by Killikerry the Colchos of Ptolemy, being given in exchange for pearls, or imported as previously conjectured. History makes no mention of a Roman station in the south of India, whence such coins might have been issued; it is very remarkable, however, that the historical books of the Brahmins of Tulava in Canara contain an account of an European or Yavana dynasty ruling formerly at Anagundi. By Yavana, I apprehend, is meant the children of Yuvan or Javan the great ancestor of the Greeks, though by slight alteration it might be read *Yu*vana or *Eu*vana, that is the country of Europeans or Europe, *Ana* being an expression indicative of a land found in all quarters of the Globe, thus in Europe Bri*tain* or Brit*annia*, Allem*aigne* or Germ*ania*, Esp*agne* or Hisp*ania*, Lusi*tania*, &c.; in Asia Hindoo*stan*, Ja*pan*, Affghani*stan*, Turki*stan*, &c. in Africa Tett*uan* Hin*zuan*, &c.: in America Yuta*can*, &c.

Huna is another name for Europe occurring in the ancient Brahminical books.

IV. *Notice of the Storms experienced at Madras on the 20th October and 25th November,* 1846. *By* J. J. Franklin, Esq.

The gale which was experienced at Madras on the 20th October, 1846, was not of that violent nature, which is the usual characteristic of these visitations in tropical climates; and many persons imagined that it was not of the class of rotatory Storms from the fact that the wind during its continuance did not veer round more than a point or two. This, however, may be easily accounted for by supposing the nucleus of the storm to have been formed to the North of Madras, proceeding thence in an undulating Northerly direction, and passing between Masulipatam and Guntoor, at which places it will be seen, on inspection of the diagram, that it was blowing at one and the same time from opposite points of the compass; and that, as the nucleus approached and passed those stations, the wind shifted in a manner perfectly reconcilable to the assumption of its motion being circular.

Some hours before it commenced at Madras the wind had been blowing briskly from W. S. W. to W. N. W. with an unusual fall

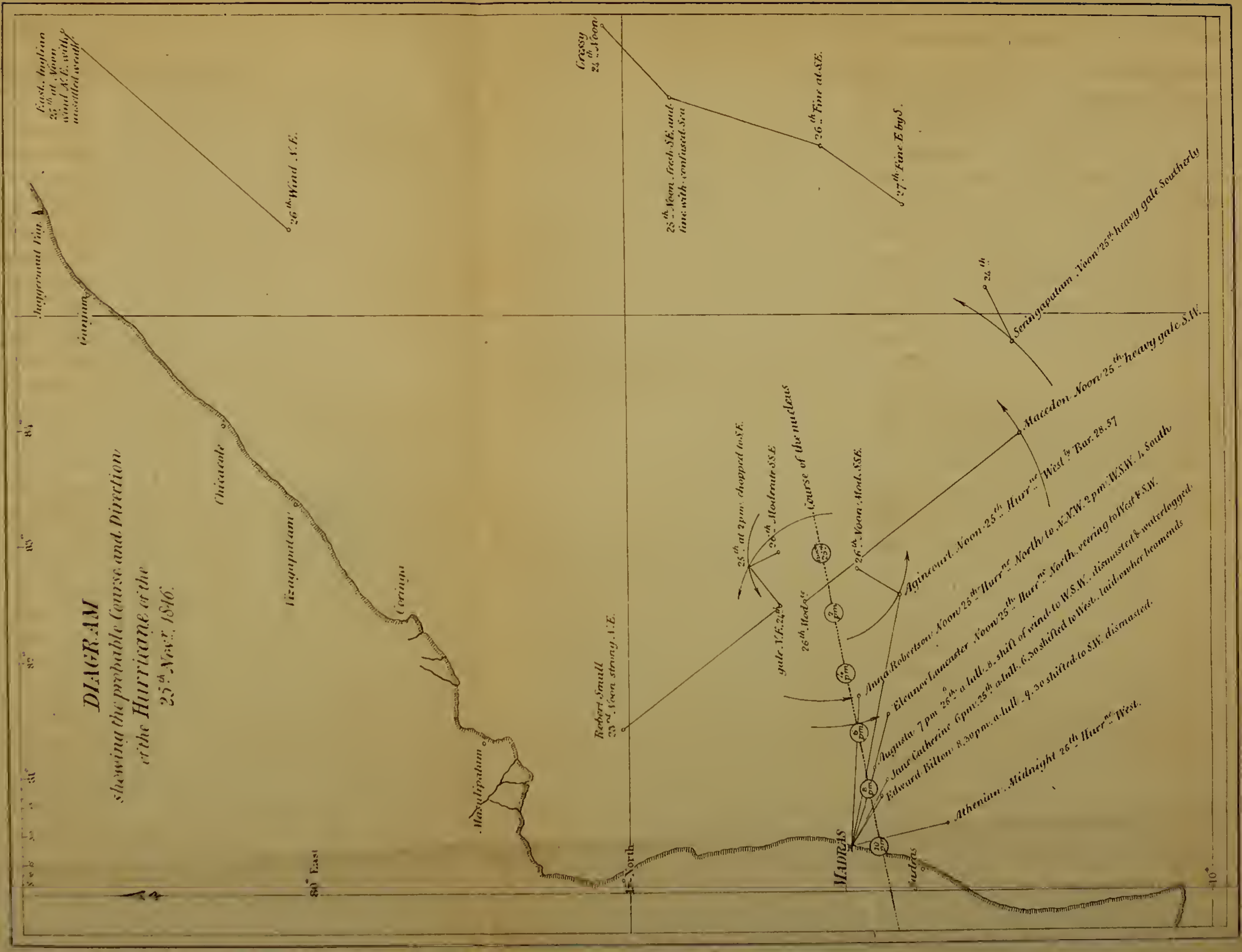


DIAGRAM
showing the probable Course and Direction
of the Hurricane of the
25th Nov. 1846.
Juggernaut Pag.
Ganjam
Chicacole
Vizagapatam
Coringa
Masulipatam
Madras
Sadras
80° East
15° North
10°
Cressy 24th Noon
26th Fine at S.E.
27th Fine E by S.
26th Wind N.E.
Robert Small 23rd Noon strong N.E.
Course of the nucleus
26th Noon Mod. S.S.E.
Agincourt. Noon 25th Hurr. West. Bar. 28.57
Macedon Noon 25th heavy gale S.W.
Seringapatam. Noon 25th heavy gale Southerly
Athenian. Midnight 26th Hurr. West.

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of rain, and a sky of a leaden colored hue. After noon it veered back to the Westward, and gradually drew to W. S. W.: the sky becoming more obscure, and the Barometer indicating approaching bad weather. It then increased gradually till, about 9 P.M., when it was blowing a fresh gale from W. S.W.: the rain at the same time falling in sheets of water. By midnight it had amounted to a moderate hurricane, at which it remained till about 4 A. M. of the 21st, when the Barometer which had fallen to 29·492, began to rise although slowly. Between 11 and 12 on the night of the 20th, the wind was from S. W. bW, but, the indicating pencil having got involved with that of the rain guage, the register of the direction of the wind was lost for some hours; yet, as at 7 A. M. on the 21st it was found still to be blowing from nearly the same quarter, S. W. bS., and it was generally observed as an extraordinary fact by persons, who took notice of the different phases of this gale, that the wind did not at any time blow from the sea, it may be inferred that it remained tolerably steady during the above time when its greatest force was exerted.

The amount of pressure on the square foot during this time was not more than 17½ lbs., being what would be denominated a heavy gale; but from the damage sustained by the shipping which got a trifling offing, and which it must be observed experienced the wind in the same direction as at Madras, that is, off the land, it is probable that the force was greater at sea than on shore. It is worthy of observation too that the various accounts given by the Commanders of Vessels who were in this gale, although at considerable distances from each other and from the shore, agree in establishing the period between midnight and 4 A. M. of the 21st as the time at which the gale was felt in its greatest strength. This must lead to the conclusion that the body of the hurricane was not passing from East to West, but was formed in such a position as to throw both Madras and the shipping in its S. Eastern Quadrant.

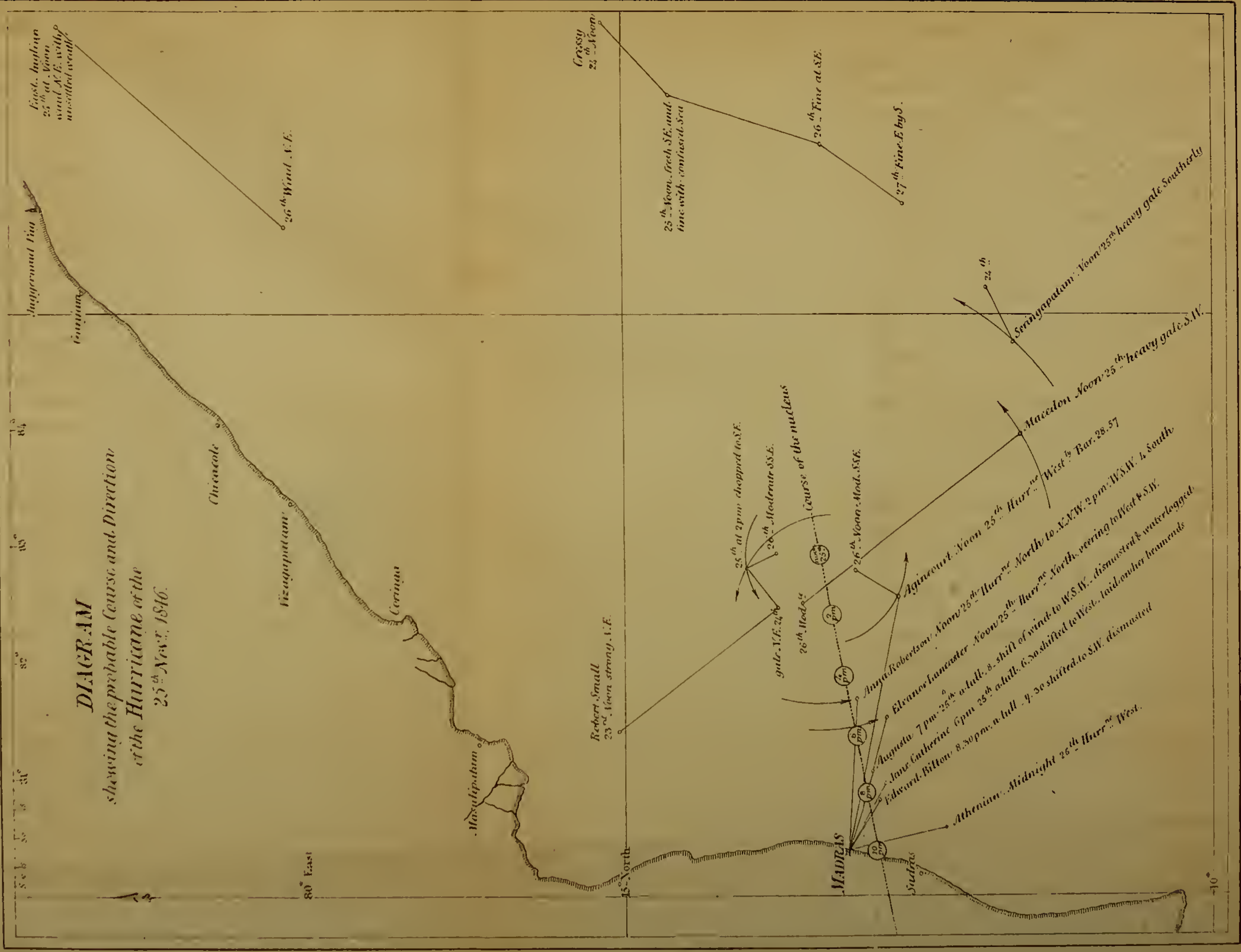
At 4 A. M. of the 21st the wind together with the rain, began to subside and to draw round to the Southward, in which quarter it remained strong and variable till between 7 and 8 A. M. of the 22d when it backed round to the N. W.: the Barometer gradually rising till the 25th when it attained its previous height of 30·00. On board the Ships *Ann Armstrong*, *Edward Bilton*, *Lady McNaughten*, and *Eleanor Lancaster*, between 30 and 40 miles from the land, the Barometer is reported to have ranged between 28 and 29 inches during the height of the gale, giving as a mean of the whole 28·67. This

shows a difference of nearly an inch from the height registered on shore, and may perhaps be attributable to the instability of the vessels, as well as original incoincidence with the standard Barometer. The fact of its rising after 4 A. M. of the 21st seems nevertheless to be allowed, which further confirms the supposition that the gale passed from them and Madras about the same time, which would not have been the case had its proper motion been from East to West.

It now only remains to show that it proceeded in a Northerly direction. On the night of the 20th when it was raging at Madras from S. W., no mention is made of the wind having been more than ordinary at Masulipatam and Guntoor. On the morning of the 21st however it blew at both those stations from East to N. E.—at which time, be it remembered, it was still blowing hard at Madras from S. W. to South. The centre of the hurricane must therefore be considered as about midway between these latitudes. It then appears to have travelled slowly to the Northward, making a bold curve to sea-ward; and by about noon of the 22d, when its influence was no longer felt at Madras, the nucleus must have resumed its course over the land, striking it a little inside false point Devi. At this time Masulipatam had it from the Southward, the *Agincourt* off the Santopilly rocks had it from S. E., and Guntoor from the Northward. Then continuing its course as before, it clearly passed between these two towns, Guntoor at 10 P. M. of the 22d having it at N. W., and Masulipatam at the same time at S. W.; after which it passed away and probably dispersed.

These data appear fully to warrant the assumption that the hurricane was of the rotatory description, although not one in which the violence of the wind was exerted to any great extent. The most remarkable feature in it was the extraordinary fall of rain that took place during its duration. From sun-set of the 20th to sun-rise of the 21st, the Pluviometer showed an amount of 17·5 inches to have fallen, being for a period of about $12\frac{1}{4}$ hours: a fall unprecedented in the meteorological annals of Madras. The whole quantity that fell from sun-rise of the 20th to sun-set of the 21st was 24·33 inches.

The hurricane of the 25th November was as usual preceded at Madras by a murky atmosphere with the wind blowing in squalls from the N. W. to North with heavy rain. After noon it veered round to N. N. E. and N. E., the wind rapidly increasing and the Barometer falling.



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It appears to have been formed about 300 miles E. by N. of Madras. Had it come further from the Eastward an inspection of the accompanying diagram will show that the *Cressey* must have fallen in with it between the 24th and 25th, whereas at noon on the 24th she was running to the Southward with a main royal set; and on the 25th, although she had a heavy confused sea from the S. W. causing the vessel to pitch much, she had fine weather.

Taking it for granted then that the formation took place about 300 miles E. by N. of Madras, it appears to have pursued a straight course towards the coast, which it struck about midway between Madras and Sadras, soon after which it seems to have abated.

At noon of the 25th I place the nucleus about 160 miles Eastward from Madras, at which time the ships that left the roads on the 24th began to feel the hurricane from the Northward, from which quarter it rapidly veered to West and S. W. as the centre approached and passed to the North of them. The *Agincourt* being further out had it about West at the same time, veering to S. S. W. and ultimately to S. E. by E. as she passed through the South-Eastern quadrant of the vortex.

The *Macedon* and *Seringapatam* were both at this time experiencing a gale between South and S. W., clearly indicating that they must have been sufficiently far from the nucleus not to feel the sudden shifts of wind that always are, and were on this occasion, found to be so dangerous to vessels in its more immediate vicinity. Only the outer part of the South-Eastern quadrant was entered by them, for although the *Macedon* subsequently ran to the N. W., and crossed the track of the hurricane, it had passed before she went over the ground.

The *Agincourt* which was the vessel furthest to the Eastward, she having parted on the night of the 23d, felt the greatest fury of the storm about midday of the 25th, when the Barometer showed 28·57. The *Anna Robertson* and *Eleanor Lancaster* left the roads early on the afternoon of the 24th and experienced its greatest force between 4 and 5 P. M. of the 25th, showing the onward motion of the storm to have been from the Eastward. The *Zarah* must have been somewhere near these ships, having run out about the same time with them, but the memo. of her proceedings does not show clearly her position. It appears however that she experienced the height of the storm about the same time as the two

before named vessels, and on a sudden shift of wind was nearly sunk by the shifting of her cargo in a heavy lurch. At this time at Madras the wind was merely a fresh breeze from North to N. E. We were about West of the centre which was travelling W. by S. gradually placing us in the N. W. Quadrant of the hurricane.

The Barometer showing, on the morning of the 25th, still further indication of approaching foul weather, the remaining ships *Athenian*, *Edward Bilton*, *Augusta*, and *Jane Catherine* left between 11 A. M. and 2 P. M. on that day; and the three last having run to the Eastward encountered a lull between 7 and 8 P. M. A little discrepancy occurs in the times at which this is said to have happened, but some allowance must be made for people under such fearful circumstances. Previous to the lull the wind had been N. E. to N. N. E. with all three; the sky still remaining as dense as ever, and the Barometers showing no indication of a rise. It remained calm for about half an hour when the blast returned in all its fury from West to S. W. throwing all three vessels on their beam ends. The *Edward Bilton* and *Augusta* were dismasted—the latter water-logged was abandoned—but the *Jane Catherine* providentially escaped without any very serious damage. The centre of the storm may therefore with safety be placed as passing a little to the North of these vessels (had it passed to the South of them the wind would have veered round to the S. E. as it did at Madras) and their positions may be assumed at between 30 and 40 miles off shore. This was between 7 and 8 P. M. At about 9·45 P. M. the greatest depression of the Barometer took place at Madras, being 29·03 inches. The centre had then reached its nearest proximity to Madras which lay due North of it, shown by the wind being East, drawing round to S. E. as the body of the storm passed to the Westward: and it may be inferred that the track of the nucleus was not at any very great distance to the Southward from the fact of the gale not having been felt at Pondicherry, although it was at Sadras, where however the trees were all blown down from the Westward directly contrary to the strength of the hurricane at Madras.

Unfortunately no register of the force of the wind was obtained after 8 P. M. of the 25th, owing to the connecting link between the registering pencil and the plate on which the wind acts having given way at this time, and there being no possibility of then replacing it. The force of the wind was however computed by a talented Engineer

Officer to have amounted to 52 lbs. to the square foot, being the amount required to be exerted to overthrow the pillars on the Elphinstone Bridge, one of which was blown down.

Register of the Sympiesometer, Barometer, and Force of Wind at Madras, November 25 and 26, 1846.

	Sympiesometer.	*Barometer.*	*Wind.*
November 25, 8 A. M.	29·26	29·70	5·5 lbs.
,, ,, 1 P. M.	29·10	29·57	7·5 ,,
,, ,, 2 ,,	29·06	29·54	8·5 ,,
,, ,, 3 ,,	29·06	29·52	8·5 ,,
,, ,, 4 ,,	29·04	29·50	8 ,,
,, ,, 5 ,,	29·01	29·49	9·5 ,,
,, ,, 6 ,,	28·98	29·46	14 ,,
,, ,, 7 ,,	28·91	29·40	19 ,,
,, ,, 8 ,,	28·85	29·31	27 ,,
,, ,, 9 ,,	28·62	29·12	The connecting line of the registering pencil being broken, no further observation could be taken.
,, ,, 9·30 ,,	28·58	29·03	
,, ,, 10 ,,	28·58	29·03	
,, ,, 10·30 ,,	28·70	29·16	
,, 26, 5·30 A. M.	29·26	29·63	
,, ,, 8 ,,	29·36	29·73	

V. *Notice regarding the names used in the Indian Zodiac. By* C. P. Brown, Esq.

An Essay by Mr. C. M. Whish on the origin and antiquity of the Hindu Zodiac was printed in the year 1827; and has been noticed on a recent occasion in the Royal Asiatic Society. In the Journal of the Asiatic Society of Bengal a paper has now appeared (in No. 167, p. 109) by Mr. J. Muir of the Civil Service, verifying Mr. Whish's assertions. This matter being mentioned to me by Mr. Walter Elliot, I replied that I was already aware of the existence of the Greek words in Sanscrit treatises, having met with them in a manuscript key to astrology. The stanza preserving the twelve names is well known among those Bramins who are skilled in *jotish* (correctly, Jyautisham) which, as Professor Wilson observes, includes "Mathematical, Astronomical, and Astrological Science." Manuscript books on this art are common: there are many in the College Library: which now contains the volumes lately transmitted from the India House as well as my own collection.

The treatises on (jotish) astrology are all in Sanscrit: and usually open with an explanation of technical words. I shall first notice a

large volume called the Jātaca Pārijātam, or Rose of Astrology, (vol. No. 2330 in the Catalogue.) It is written in the Malayalam character.

It begins with a short hymn addressed to the *Trimurti;* then to the sun, the moon, the planets, and genii. Then follow the twelve signs of the Zodiac, by the well known Sanscrit names.

Mesham, i. e. Ram.	Tula, the Scales.
Vrishabham, i. e. Bull.	Vrischicam, Scorpion.
Mithunam, i. e. Twins.	Dhanas, the "Bow."
Karcātacam, Crab.	Macaram, Sea goat.
Simham, Lion.	Cumbha, Vessel.
Kanya, Virgin.	Mīnu, Fishes.

"But, (says the author) the following names are given to these signs."

(Here follows the stanza quoted by Mr. Whish:) it is in the *Arya* metre, resembling that used by Horace

Miserarum est neque amori, &c.

The words are thus spelt: according to *Wilkins's* system.

Kriya tauru jutuma kulīra
Lēya Parthōna Jūka, kōrp ākhyāh
Tauxica, Akōkērō.
Hridrōg Aschsthasih cramaṣah.

The same stanza appears in the Vrihajjātacam (written in the Grandham character, ms. No. 2026) page 6. It runs thus:

Kriya tāvuru jittuma kulīra
Lēya Pārthōna jnāka kōpp yārkhyāh
Tauxica Akōkēro.
Hridrōg asch-āntyabham chēttham.

A third manuscript, in the Telugu character, (vol. 558,) of the Vrihat jātacam, by Bhattotpāla, in page 6 exhibits the stanza thus:

Kriya tāvuru jitumō kulīra
Lēya, Pārdhōna, jūka kaurp' ākhyāh
Tauxica ākōkērō
Hridrōgasch' āntyabham chēd dham.

On comparing the various readings of these three manuscripts, with those printed by Mr. Whish and Mr. Muir, and with the Greek names, the following is the result.

Krios, (the Ram) is written in all Kriya.

Taurus, the Bull: Tāvuru, Tāburi, Tauru.

Didymus, the Twins; Juthuma, Jituma, jutuma, jittuma.

Karkinos the crab; is in all kulīra: the plain Sanscrit word for the crab.*

Leon, the lion, is uniform in all, Lēya. Parthenos the virgin; parthōna, Pārthēya, and Pardhōna.

Zygus, the scales; jūka in four mss. and jnāka in a fifth.

Scorpios, Kōrpya, korp, Kōppyār.

Toxicos, the archer, is uniformly Taukshica—which may also be written Tauxicah.

Aigokeros, the seagoat, is uniformly written ākōkērō.

Hydrochoos, Aquarius, is written Hridrōga; in all but Mr. Whish's copy.

Ichthyes, the fishes. Isthusi, Aschsthaisih. These words resemble the dative, ichthusi. In three manuscripts this word is abandoned: being hard to express in Sanscrit characters.

The three manuscripts I have consulted are ancient: the first quoted is perhaps two hundred years old: it is one of those received last year from the Honorable Company's Library in London. The other two are perhaps half as old: they belonged to my own collection. All three are written on palm leaves. The verses are familiarly known to most of the Bramins who have had occasion to study astrology.

Mr. Whish also cites a Sanscrit verse which mentions the Sun, Mercury, Mars, Jupiter, Saturn and Venus (called in Greek Helius, Hermes, Ares, Zeus, Kronos and Aphrodite) by the names Heli, Hema, Arah, Jyōk, Kōnah, and Asphujit. In the Brihajjātacam I have read this verse: which deviates only in one name, reading (in 558) Jyos for Zeus. This is a yet more apt coincidence.

Having satisfied myself that Mr. Whish's quotations from the astrological treatises are veracious, I shall close this paper with a query regarding the names of the days of the week. It is well known that among the Hindus Sunday is called the day of the Sun; Monday the day of the Moon; Friday the day of Venus; Saturday the day of Sani (Saturn) and so forth: *precisely* agreeing with European names: and the same names appertaining to the same days.

* This word *Kulira* though uniformly written in all the manuscripts, seems an error for *Karkiṇa*: it is the only Sanscrit name used in this verse instead of a Greek name: the metre (Arya vrittam) *can* use *Karkina* (a dactyl) in the third seat; and *cannot* use the (amphibrach) Kulira in irregular seats: viz. 1st, 3d, 5th, 7th. See Colebrooke's Essay on Sanscrit Poetry, vol. 2, p. 72 note. Captain Jervis in his volume on Weights and Measures, Bombay 1836, page 132, has pointed out these Greek words in the Sanscrit canons. He seems to have read *Kurku*, which, if correct, is more like the Greek word.

Now these names are mentioned in modern Hindu Almanacks, and yet they are utterly unknown to all Hindu authors and lexicographers. Is not this evidently copied from the custom of Europe? For the *week* or measure of seven days has been known among Hindus only in modern times: in ancient days they measured each month by the increasing and decreasing moon alone: and in the present day a Hindu usually dates a letter or document thus: "On Monday the sixth of the bright fortnight in Magha," &c. but in old times the day of the fortnight was thus specified without being named: and at present the name is often omitted. The Hindus have copied the names of the weekly days from Christians: not from Musulmans, whose system is different. What has now been stated shows that the signs of the Zodiac bear Greek names: which however have never come into ordinary use in India.

VI. *Account of the Gold Mines in the Province of Malabar. From official papers communicated by Government.*

The existence of Gold in the province of *Malabar* was made known to Government by the Collector, Mr. Sheffield, in a communication, dated 10th January, 1831, in which he stated that gold dust to the value of Rupees 5,285 had been collected at *Carcatode* in the *Ernaad* talook, in the *Nelamboor* valley, at *Caraloondy* on the sea-beach in the *Shernaad* talook, and at *Moonanaad*, *Moopeynaad*, and *Nambalacotta* in *Wynaad*, the whole weighing 11,449 fanams.

"Of this quantity" he continues "by far the greatest portion has been forwarded to the Presidency, the remainder being 2,908½ new gold fanams weight, valued Rupees 1,326-6-2, will be delivered over by me to Mr. Hudleston, who has been instructed to collect as much more gold dust for the use of Government, as can be obtained.

"I beg however to state that in consequence of an increased demand for this valuable commodity owing to a greater number of persons resorting to this province from the eastern districts of *Coimbatore*, *Madura*, and *Trichinopoly* to purchase it, the price has risen in the average 5⅛ per cent., or from Rupees 4-2-40 to 4-3-35 for ten new gold fanams weight.

"Though gold is found in all the rivers of this district from the stream which falls into the sea at *Elatoor*, about eight miles north of *Calicut*, and as far south as the numerous streams flowing through

the *Palghat* valley which at their junction about 15 miles below *Palghatcherry* form the great *Ponany* river, [and some of which reach the southern boundary between *Cochin* and *Malabar* about one hundred and ten miles to the southward of *Calicut*]—the places and streams which afford the largest supply of gold dust are the following:—

" The *Toodakull* river which rises in the *Koondah* mountains, and after dividing the *Wallooicanaad* talook from the talook of *Neringanaad* falls into the great *Ponany* river at *Moochukul*, about two miles north-east of *Turtullah*.

" The *Arliparambur* a rivulet which flows through *Wallooicanaad* and part of *Neringanaad*, and joins the *Toodakull* river about two miles east of *Cherpoolchery*.

" The *Arnakyem* river which has its source in the *Mookoorty* and *Koondah* mountains. It forms the boundary between the *Ernaad* and *Wallooicanaad* talooks, and after passing the towns of *Malapooram* and *Teroorangaddy* meets the sea at *Caraloondy*.

" The *Carcatode* stream which rises in the *Mookoorty* valley and joins the *Arnakyem* river near *Pynaad* in the *Ernaad* talook.

" The gold found at the places above mentioned is the purest that is procurable in the district, its touch being equal to $9\frac{1}{2}$.

" The sea beach from the town of *Parparangady* to *Caraloondy* and thence to *Beypoor*, extending about eight miles in length, the latter place being seven miles south of *Calicut*. Here the gold is equal to $8\frac{3}{4}$, and it is evidently washed down from the mountains during the great freshes in the south-west monsoon, and after being carried out by the flood beyond the mouths of the *Beypoor* and *Caraloondy* rivers it is thrown back by the action of the surf, in stormy weather and deposited on the sands much higher up than the sea usually reaches when the weather is moderate.

" *Kutchambāra* on the bank of the *Coodarapoya* river, which comes from the *Mookoorty* valley, and unites with the *Beypoor* river about two miles below *Nelamboor*. The touch of the gold found here and in the bed of the *Coodarapoya* river is nearly $9\frac{1}{4}$.

" The *Carumpoya* and *Poonapoya*, or Golden River, both which streams take their rise in a high range of mountains called the *Paral Mallah* situated north-east of *Mookoorty*, and forming part of the main chain of the *Neilgherries*; when collected in one body near *Poolliumparra* in *Wynaad* the stream receives the name of the *Paundy-poya*, but this on approaching the Ghauts is again divided into two streams, and the main branch, called in the *Nelamboor* valley the

Carumbye, rushes down the *Alliampully Cherum*. The *Poonapoya* descends the mountains between *Alliampully* and the *Carcoor Cherrum*, and long before its junction with the *Carumbye* it receives both the *Kellakumpoya* and *Caracoorpoya*.

" The *Kellakumpoya* and *Caracoorpoya* above mentioned ; the former river rushes down from *Wynaad* into the *Nelamboor* valley through the *Pundaloor Cherrum*, and the latter descends from *Devalla* to the right of the road through the *Carcoor* Pass.

" Gold dust is also found on the plains in the *Nelamboor* valley, and frequently on elevated spots, particularly at *Teeroowāly*, a hill near *Mambāat Angudy* about 150 feet above the level of the *Beypoor* river during the highest freshes. On the slope of this eminence gold is procured some feet below the surface of the ground, in pits dug by those who come in search of it.

" North of the *Beypoor* river it is found in the *Teeroowambaddy* division of *Polwye*, in a mountain stream which descending the Ghauts to the left of the road through the *Tumberchery* Pass runs through the *Tumberchery* and *Polwye* districts and forms a junction with the great *Beypoor* river between *Pawoor* and *Sherwaddee* and opposite to *Mapooram* in the *Ernaad* talook. The touch of the gold found here and of that which is generally procured in the *Nelamboor* valley is about $8\frac{1}{2}$.

" Above the Ghauts in *Wynaad*, gold is found in *Parkmeetil*, a higher table land, between *Manantoddy* and *Nambollacotta*, at a place called *Chollyode* in *Moonanaad* and *Nillialam* and *Ponany* in *Moopeyanaad ;* it is likewise found at *Devalla* and its immediate vicinity in *Nambollacotta ;* but the gold of *Wynaad* is much inferior to that which is washed down from the lofty mountains actually appertaining to the *Neilgherries* and *Koondahs*, its touch being only $7\frac{3}{4}$."

Mr. Sheffield then proceeds to describe the manner in which the gold dust is found and separated, as follows:

" The earth or sand in the mountains, hills, paddy-fields and beds of rivers and rivulets known to be impregnated with this valuable ore is dug up. The places selected are those in or near water such as running streams, ruts, ravines and breaks in the mountains and low ground into which the course of the water is most likely to drive the ore during the rainy season. The earth so collected is put into a kind of wooden tray hollowed in the centre and not unlike a Turtle's shell, called a *Pautey*, which is submerged in water just enough to overflow it and no more, and turned with an

undulating motion by the washer with one hand, while the soil is stirred up with the other until all the earthy particles are washed out of it, and a sediment is left in the hollow consisting chiefly of a mixture of black sand and particles of Iron and Gold. The *Pautey* is then taken out of the water, and one end of it being somewhat elevated, water is gently poured upon its contents until the gold and metallic sediment appear on the border distinctly divided from the earthy mass. The golden particles are separated with a grain or two of quicksilver which is rubbed into them, and then put in a piece of tobacco leaf, which being placed in a crucible or more generally between two pieces of lighted charcoal the heat causes the quicksilver to evaporate, and the gold is then taken out in a pure state.

" When gold-dust is found in streams a wooden trough, about 4 to 4½ feet long and 15 inches wide, is frequently used, and into this the sand or soil from the bed of the river or rivulet is thrown as fast as it is taken out and then washed by the person in charge of the trough, who is constantly stirring the sand with his right hand and pouring a gentle stream of water upon it with his left, until nothing remains but the heavy black sand and particles of iron and gold, and when the dust appears on its borders it is collected with a proportion of quicksilver and then separated in the manner before mentioned.

" Native gold is likewise found in small pieces, particularly in the beds of the several branches of the *Beypoor* river flowing through the *Nelamboor* valley before they all unite above *Mambaatangady*.

" In the rainy season the *Pauties* are worked upon the mountains, hills and other elevated spots, but these places, owing to the want of water to assist the operation, are abandoned at the end of the rains, and the *Pauties* are employed during the dry months in the beds of rivers and smaller streams.

" The sands on the sea beach between *Parparangaddy*, *Caraloondy* and *Beypoor* are most productive during the months of June, July, August and September, when the rivers which fall into the sea at *Beypoor* and *Caraloondy* are filled by the South-west Monsoon, but gold is found here, though in smaller quantities, throughout the year.

" There appears no reason whatever to doubt that the matrix of the golden ore is in the mountains and hills of *Malabar*, and even many elevated spots in the vallies of *Nelamboor* and *Mookoorty*, and the immediate vicinity of *Devalla* and the *Koondah* and *Neilgherry* mountains; whilst that which is found in the beds of rivers and other

mountain streams is fortuitously brought down by the Monsoon rains.

"Though a very extensive search has been made among the Records of my Office, since the orders of Government under date the 18th November, 1828, to afford information on this subject, I regret to state that I have not succeeded in finding that any endeavour whatsoever was made by the several Collectors, since this province came into the possession of the Honorable Company, to discover the mines or places whence the gold issues. These however appear to have been noticed by the Honorable Mr. Duncan, late Governor of Bombay, who enjoined the authorities then in the province, in the year 1793, to collect and submit to him every information that could be obtained on the subject, but it does not appear upon record that any scientific person was deputed to explore the places where the dust is found in order to trace the sources from whence the supplies are derived, or that any particular inquiry on the subject was set on foot, though it has been well known from the earliest period that gold is produced in the province, and the collecting of it has been formed out in *Wynaad* and the *Nelamoor* valley for the last forty or fifty years."

About the same time that the preceding letter was written a Swiss watchmaker of *Cannanore*, named Henry Louis Huguenin, petitioned the Governor (the Right Honorable S. R. Lushington) to employ him in exploring the mineral resources of *Malabar*, and as it appeared that he understood the art of mining and was moreover acquainted with the language and people of that part of the country, his offer was accepted. It was stipulated that he should receive one half the proceeds of the first twelve months, and he was placed under the orders of Lieutenant Woodley Nicolson, of the 49th Regiment N. I., who with a small party* of Pioneers was directed to aid him in exploring the tracts specified by Mr. Sheffield, the whole being under the immediate superintendence of Major Crewe, the Officer Commanding the Station of Ootacamund.

They commenced their search in June, 1831, in the neighbourhood of *Devalacottah*, but both Lieutenant Nicolson and Mr. Huguenin were soon afterwards attacked with dangerous fevers which laid them up for a considerable time. They were enabled however to resume operations on the 10th December at a place named *Carcatode*, which was selected apparently in consequence of native reports. The

* A Havildar and 12 Privates.

farther account of their proceedings is given in Lieutenant Nicolson's own words.* "We continued our researches in the same neighbourhood until the 24th when it became evident from the daily average of work that it was not worth while remaining there, at any rate at this season. The place seems famed for gold in consequence of the superior touch of the small quantity found there, a circumstance which greatly affects the nominal value of the metal to be found elsewhere, a great deal of which is sold by the Natives as *Carcatode* gold. The nature of the work in that direction will be found in the detailed reports I shall duly have the honor of forwarding.

"I have now to add that with the view of pursuing the search throughout the *Nelamboor* valley, we arrived at this place on the 26th ultimo, and were not a little surprised at finding a regular set of mines worked by five or six hundred Moplays, who (if their headmen can be believed) are obliged to give one barley-corn weight of gold per man to the Zemindar per diem, by which a direct daily tax of about twenty Rupees is levied by him without his paying anything to Government. On our arrival the whole of the Moplays made off; but in consequence of my issuing proclamations that in continuing their work, they should meet with no molestation, a great number have returned to the mines. These works are very extensive, the shafts are generally from ten to fifty feet deep, and the deeper they are, the greater is the quantity of gold to be found. The only impediment to the work being the continual accumulation of water, which they have no idea whatever of raising but by assembling in great numbers with chatties. We could easily employ bamboo syphons for this purpose, but as our work would be overlooked by the Moplays, they would not fail instantly to apply the syphon to all the other mines in the neighbourhood to our great disadvantage hereafter. Therefore until we have a sufficient number of workmen and are sufficiently strong in Pioneers, or others to place guards over the miners, we cannot work them to any great advantage.

"It will at once appear evident that where five or six hundred men find it worth their while to work with the miserable and slovenly apparatus they possess, and with which the very least each man can possibly find is the weight of the third of a gold fanam per diem, which trifling day's work very seldom happens, (as the quantity found by one man daily varies from that just mentioned to the weight of ten gold fanams, on which occasions the mud is always taken from

* Under date, Capul near Mombaat Augady, 3d January, 1832.

the deepest shafts,) it will then as above mentioned, appear evident that were these mines systematically worked on the European principle, the quantity of gold to be had would be very considerable. But situated as I am without the above means, and with so small a party, we can do little more than as many of the Natives, and can only for the present continue the search for the most lucrative mines in the District, and for those places where it may be worth while for Government to keep up regular Mining establishments, amongst which number these mines may most undoubtedly be classed. The Pioneers have collected nearly an ounce of gold during the week they have been here, and had I the regular European apparatus this *ounce* would, I have no doubt, have been a *pound.*"

The mines of *Capul* do not appear to have been previously known, though Mr. Sheffield mentions that gold had been found by digging pits in the *Termoolly* Hill near *Mombaat Angudy.* In addition to the gold collected by the Pioneers at *Capul*, Lieutenant Nicolson purchased two other pieces obtained by Native workmen in other parts of the *Nelamboor* valley, which on being analysed in the Assay Office at Madras gave the following results.

No. 1. The specimen of gold from the *Capul* mines is very fine, being B 1 car. $3\frac{1}{4}$ grs., its weight was 2 dwts. 14 grs., and its value Rupees 5, Annas 9, Pie 5; one hundred parts of this specimen would consist of the following metals :

					Touch.
	5	9	5	Gold................	99·22
	4	4	0	Silver..............	0·78
Grain	1	5	5		100·0

One ounce of gold of this fineness would be worth Rupees 43, Annas 4, Pie 8.

No. 2. The specimen of gold from the *Nelamboor* Rajah's mines is of fineness B 0 car. $2\frac{3}{4}$ grs., its weight was 3 dwts. 4 grs., and its value Rupees 6, Annas 8, Pie 6; one hundred parts would consist of the following metals :

					Touch.
	6	8	6	Gold...............	94·53
	5	12	0	Silver..............	5·47
Grain	0	12	6		100·0

One ounce of gold of this fineness would be worth Rupees 41, Annas 4.

No. 3. The specimen of gold from the *Devalla* mines is of fineness W 0 car. $\frac{3}{4}$ grs., its weight was 3 dwts. 2 grs., and its value Rupees 6, Anna 1, Pie 10; one hundred parts would consist of the following metals:

				Touch.
6	1	10	Gold................	90·88
5	0	0	Silver..............	8·86
			Copper..............	0·26
Grain 1	1	10		100·0

One ounce of gold of this fineness would be worth Rupees 39, Annas 10, Pie 6.

From Lieutenant Nicolson's next report dated *Carembat* jungle near *Careoor*, 25th January, 1832, it appears that his inquiries had excited the jealousy and alarm of the Native Miners. "The Moplays at the *Capul* mines" he says "having commenced a system of devastation in filling up the shafts, &c. I have been under the necessity of applying to the Collector for a Havildar's Guard, on the arrival of which at *Capul* (having heard that the same system of depredation was going on in the mines in this direction for the purpose of giving us every possible difficulty and impediment in our search) I immediately left half my party at *Capul* under the command of the Pioneer Havildar, with the necessary orders for protecting the works, &c. &c. while I am continuing the search and endeavouring to prevent injury being done to the mines in this neighbourhood, which are said to be very numerous and much richer than those at *Capul*; as yet however we have only come upon one, which is in a mountain called *Combala Nally*, one of the *Chulumally* range close under *Nelliallum*.

"The average quantity of gold to be found in this mine may be taken at about a gold fanam's weight per man daily, but in consequence of the constant search we are making in the jungles for the best mines, we have no time for gold-washing."

The prospects now appeared so encouraging, that Lieutenant Nicolson considered his means altogether insufficient for prosecuting the work, and stated additional aid to be indispensable. He proposed that the whole corps of Pioneers should be furnished with Trays or *Pauties*, and be instructed in the use of them, and set systematically to work. Their employment, he was sanguine, would lead to the discovery of many valuable mines, particularly in the *Coondah* and *Mookoorty* Hills, "to which we have fairly traced the strata which contain gold in that direction."

Seven Ingots of gold the produce of their labors up to this time, and obtained, apparently, by the processes of washing and amalgamation, were forwarded to the Mint and yielded the following results.

" The specimen No. 1 of gold from the *Nelamboor* mines, is in fineness B 0 car. $2\frac{3}{4}$ grs., its weight when received, was 3 dwts. 1 gr., and its value Rupees 6, Annas 4, Pie 4 ; one hundred parts of this specimen would consist of the following proportions:

Gold	94·53
Alloy	5·47
	100·

One ounce of gold of this fineness would be worth Rupees 41, Annas 3, Pie 8."

" The specimen No. 2 of gold from the *Nelamboor* mines, is in fineness B 0 car. $2\frac{3}{4}$ grs., its weight when received, was 3 dwts. 1 gr., and its value Rupees 6, Annas 4, Pie 4 ; one hundred parts of this specimen would consist of the following proportions:

Gold	94·53
Alloy	5·47
	100·

One ounce of gold of this fineness would be worth Rupees 41, Annas 3, Pie 8."

" The specimen No. 3 of gold from the *Nelamboor* mines, is in fineness B 1 car. $0\frac{1}{4}$ gr., its weight, when received, was 1 dwt. 7 grs., and its value Rupees 2, Annas 11, Pie 3 ; one hundred parts of this specimen would consist of the following proportions:

Gold	96·9
Alloy	3·91
	100·

One ounce of gold of this fineness would be worth Rupees 41, Annas 13, Pie 8."

" The specimen No. 1 of gold from the *Capul* mines, is in fineness B 1 car. 3 grs., its weight, when received, was 3 dwts. 16 grs., and its value Rupees 7, Annas 14, Pie 8; one hundred parts of this specimen would consist of the following proportions:

Gold	98·96
Alloy	1·4
	100·

One ounce of gold of this fineness would be worth Rupees 43, Annas 2, Pie 10."

" The specimen No. 2 of gold from the *Capul* mines, is in fineness B 1 car. $3\frac{1}{4}$ grs., its weight when received, was 2 dwts., 11 grs., and its value Rupees 5, Annas 5, Pie 1; one hundred parts of this specimen would consist of the following proportions :

Gold,....................................	99·22
Alloy,....................................	0·78
	100·

One ounce of gold of this fineness would be worth Rupees 43, Annas 4, Pie 2."

" The specimen No. 3 of gold from the *Capul* mines, is in fineness B 1 car. 3 grs., its weight when received, was 3 dwts. 17 grs., and its value Rupees 8, Anna 0, Pie 1 ; one hundred parts of this specimen would consist of the following proportions :

Gold,....................................	98·96
Alloy,....................................	1·4
	100·

One ounce of gold of this fineness would be worth Rupees 43, Annas 2, Pie 9."

" The specimen of gold from the *Cacatode* mines, is in fineness B 1 car. $3\frac{1}{4}$ grs., its weight, when received, was 3 dwts. 4 grs., and its value Rupees 6, Annas 13, Pie 8; one hundred parts of this specimen would consist of the following proportions :

Gold, ...	99·22
Alloy,....................................	0·78
	100·

One ounce of gold of this fineness would be worth Rupees 43, Annas 4, Pie 7."

In reply to an inquiry for explanation regarding the difference between the cheaper rate at which he had purchased the specimens sent and the value assigned to them by the Mint Master, Lieutenant Nicolson observes, that it arose from his " having purchased them from the gold-washers themselves, previous to their getting into the hands of the Soucars, whose customary profits would have otherwise made them much dearer," and he adds " if people were stationed at the several mines to purchase the gold on account of Government, they could obtain it at the following rates :

		Rs.	*Value according to the Mint Master's Report.*		
In Wynaad.	per oz.	32	39	10	6
In the Nelamboor Valley.	„	34	41	4	0
At Capul and Cacatode..	„	36	43	0	0

If required to be melted into ingots 4 Annas per ounce must be added for Goldsmith's hire and borax—so that the purchase of *Wynaad* gold will yield a profit of upwards of 23 per cent., *Nelamboor* gold 20 per cent., and *Capul* gold 19 per cent."

The success that attended the prosecution of their examination of the *Nelamboor* valley is thus related. " We have returned to *Capul* after having duly searched as much of the *Nelamboor* valley as the jungle has permitted us to penetrate, and I am happy to add that we have been as successful as could be wished. The mines in that direction are innumerable ; the principal ones however are in the thickest part of the jungle immediately under the *Wynaad* Hills, and near the following villages belonging to the *Teroopaad* of *Nelamboor*, viz. *Coranbaat*, *Kotchapoora*, *Moondairy* and *Maneecoote*. The *Coranbaat* jungle is mined throughout wherever the ground will admit of water being supplied from the neighbouring Rivers, this being the only thing requisite as the whole of the soil under the Hills contains gold, the quality of which is much the same as the specimen labelled ' from the *Nelamboor* Rajah's mines.' "

At this stage the party were again compelled to desist from the ravages of fever. Lieutenant Nicolson and Mr. Huguenin were both obliged to return to *Calicut* seriously ill, and the Pioneers were recalled to the Head Quarters of the Regiment on the *Neilgherry Hills*.

Lieutenant Nicolson came round from *Cannanore* to *Madras* by sea, and having sufficiently recovered his health by the voyage returned to the scene of his labours in June, 1832, visiting such spots on his way as he considered likely to produce the mineral of which he had been in search for so many months. Tidings of the existence of gold were found " at *Darampoory*, at the foot of the *Shervaroy* Hills, at *Sattiamungalum*, *Danagancottah*, *Addevarum* or *Stremogay*, and *Metapolliam*, in the neighbourhood of which, there are, I am informed, now about thirty people employed in gold-washing." He likewise made inquiries as to the market prices of gold and found " that in all large bazars where there is a great demand for gold its commercial value far exceeds its real value as reported by the Mint Master, for instance, gold of 9 touch is generally sold in the Madras

bazar at 15 Rupees for the weight of 1 Rupee which is at the rate of 50 Rupees per ounce *Troy*, since that quantity weighs $3\frac{1}{3}$ Rupees, while its value as reported by the Mint Master is only 41 Rupees, 4 Annas. Now the original cost at the mines being 34 Rupees (for 9 touch) per ounce; it follows that the profit to be obtained in a commercial point of view is nearly fifty per cent., while the real value of the metal at the Mint only gives a profit of about 23 per cent. on the prime cost—thus showing the infallible advantages that must accrue to Government from their monopolizing the sale of gold wherever it is to be found, by purchasing it direct from the Miners, before it can possibly get into other hands."

This he appeared to consider a more favorable plan for raising a revenue than that of working the mines at the expense of Government, but it would in that case be necessary "to prevent the gold being smuggled or purchased by the Native Merchants who are always in attendance, for the produce of every day's work, and for which they never pay the workmen in coin, but in articles of food, raiment, &c. &c. on which again they charge a very great per centage, so that their profits must be enormous, and as they are in the habit of using false weights, such as introducing lead into the grains of paddy with which the gold is weighed, and various other modes of extortion, the gold bought by these Soucars does not probably cost them more than half what I paid for it. The whole of the Miners appeared to be entirely at the mercy of these Merchants, and were obliged to give them over, every Rupee they received from me." With regard to the working operations, he observes "It must be nevertheless evident that a little machinery would greatly increase the quantity to be procured. For instance, their present mode of crushing ore, is by breaking one piece against another, until there is a sufficient quantity of dust to fill a tray, which slow mode of working, does not allow them to wash more than 3 or 4 trays full per man in the course of the day, whereas with pumps and stamping mills, they might probably wash ten times that number, and no fear can reasonably be entertained of the mines failing or becoming exhausted, since the whole country, for a circle of nearly fifty miles immediately under the Ghauts contains gold. In addition to the profits I have above enumerated, there is also that of the tax which appears to have been hitherto raised by the Zameendars of Districts, unknown to Government. This tax varies from one paddy weight of gold per man, to 1 do. for 3 men according to the produce of the mine. At *Capul* it is a paddy-corn weight per man daily."

The request for additional means being supported by Major Crewe, orders were issued for the despatch of two 3 inch cylinder pumps, and 8 chests of mining tools from the stores; and as it appeared that cranes and troughs could easily be made up at *Paulghaut*, authority was conveyed to Major Crewe to have the requisite number prepared. On the 19th November, Lieutenant Nicolson reported that on arriving at *Paulghaut* and making all inquiries, he learnt that, the only substantial article procurable for manufacturing machinery was wood, and that iron and all other requisites were of the coarsest possible quality; that no workmen could be found expert enough to put them cleverly or substantially together, all being carpenters of the most ordinary description; and that troughs and rakes were the only articles to be depended on at *Paulghaut*. He then proceeded to suggest the propriety of assembling a Committee at *Capul* of such persons as might be considered most competent to form a correct opinion on the present state of the mines and the most practicable mode of working them, as also of the advantages likely to accrue from sending direct to England for machinery. In conclusion he mentioned that at the time of his writing there was a very large quantity of gold for sale at *Paulghaut* and *Coimbatore*, at prices, which although much higher than at the mines, were still actually lower than the intrinsic value of the metal, as determined by the Mint Master, and solicited permission to buy up on account of Government any quantity of gold he might be able to procure at this comparatively low rate. The quantity which he calculated he could procure in the public bazar was stated to amount to about 50,000 Rupees.

In conformity with this suggestion a Committee was appointed composed of Mr. F. F. Clementson, Principal Collector of *Malabar*. Captain Ross, Superintending Engineer in *Malabar* and *Canara* and Civil Engineer in the Western Division. Assistant Surgeon Ward, M. D., attached to the Medical Establishment at *Tellicherry*, with instructions to inspect the gold mines in *Malabar* in communication with Lieutenant Nicolson, and to report on their probable productiveness, the expense which would attend the working of them, and the most efficient means of conducting the operations. They were farther desired to take into consideration the expediency of sending to England for machinery.

The Committee sent in their report on the 25th of May, 1832. They commence by stating that "in carrying into effect the orders of Government they have directed their inquiries to three subects.

I. The productiveness of the gold mines in the Zillah of *Malabar*.

II. The machinery that would be required, and the expense of working them.

III. The propriety and utility of sending to England for machinery for such purpose."

"On these different subjects, information has been derived from three sources.

1st. The correspondence of the former Principal Collectors of *Malabar* and the Officer conducting the search for gold with Government or its servants.

2d. Personal inspection of some of the places where gold is found, and

3d. The examination of persons connected with the mines."

The Committee then express their regret that they could not obtain such positive evidence on all points, as they would wish to have laid before Government. They had to derive their information on many subjects, from persons connected with the mines, who were interested either in concealing or enhancing their value, and they had therefore to guard against wilful misrepresentation on the one hand and exaggerated statements on the other.

I. *On the Productiveness of the Gold Mines.*

"In attempting to ascertain this, the Committee directed their inquiries to the eight following heads. 1. The number of mines in the Zillah. 2. The number of persons employed in mining. 3. The length of time the mines have been worked. 4. The taxes levied at different times on the produce. 5. Present state of the mines of *Capul* and *Mambaat* and the native mode of working them. 6. Quantity found by one man per day. 7. Quantity annually produced. 8. The condition of those connected with the mines.

"1. Previous to noticing the number of mines, it may be useful to take a brief survey of the country in which they are found, and of the geological features which it presents. Nearly the whole of the Province of *Malabar*, except that part immediately along the Coast consists of lofty mountains covered with dense forest or thick jungle. The principal chain more immediately connected with the present subject is formed of the *Koondah* and *Mookoorty* Hills to the south-east of *Calicut*, the *Neilgherries* to the east, and the *Wynaad* mountains to the north-east. These send off numerous lateral ranges between which are deep vallies in most places closely covered with forest. The most extensive of these is that of *Nelamboor* including nearly the whole

of the *Ernaad* Talook, bounded on the east by the *Neilgherries*, on the north by *Wynaad*, on the north-west by a lateral range running south from the Ghauts called the *Wawoot* Hills, and on the south by the *Koondah* and *Mookoorty* mountains. From these on all sides innumerable mountain streams descend, and uniting near *Nelamboor* form the *Beypoor* river of considerable magnitude, which falls into the sea about eight miles to the southward of *Calicut.* The names of the different streams are particularized in a valuable paper on the gold mines by Mr. Sheffield. In the mountainous district of *Wynaad*, streams in the same manner descend through every valley and unite into large rivers which fall into the *Cavery* in the *Mysore* and *Coimbatore* countries. The whole of the mountains above mentioned seem to be of primitive formation. In the *Nelamboor* valley, so far as the observations of the Committee went, the prevailing rock is Guciss, a kind of stratified granite. Above this in most places, is a species of clay-iron-stone, which from its softness, enabling it to be cut into the form of bricks for building, received from Dr. Buchanan the name of *Laterite.* It is what Geologists call the overlying rock of the whole country between the Ghauts and the sea to the westward, and many of the smaller hills are entirely formed of it.

" When fresh dug it is perfectly sectile, but on exposure to the heat of the sun, and to the weather it becomes of considerable hardness. So far as the gold mines are concerned, it may be considered to be a deposit formed in the lapse of ages, from the gradual disintegration of the immense mountain masses in the neighbourhood; in which process part of the precious ore may be supposed to have been washed down along with the earthy particles. However this may be, it is certain that gold exists more or less abundantly in the whole of the country on the western side of the Ghauts in every stream which takes its rise from the *Koondah*, *Neilgherry* and *Wynaad* mountains, and in the sands of the sea shore along the whole of *South Malabar.* It is throughout in the form of minute grains. One of the persons examined states that he had once or twice seen a piece as heavy as a gold fanam (about the $\frac{1}{80}$ part of an ounce Troy), but in all the specimens examined by the Committee, the portions were infinitely smaller.

" The most complete list of the places where gold mines have been opened, which has been furnished to the Committee is the following, distinguishing those which are situated in hills and those in the beds of rivers which latter form by far the largest proportion.

"Table of Places in *Malabar* in which Gold mines have been opened:

In the *Ernaad* Talook.

1. *Pally Kooth*	River.	12. *Poothoo Piryarati*	River.
2. *Kannamannah*	do.	13. *Maroothay*	do.
3. *Moothoota*	do.	14. *Koottakel*	do.
4. *Marootangaat*	do.	15. *Karimbaat*	do.
5. *Pathillypaddom*	do.	16. *Mooryatha*	do.
6. *Karote*	do.	17. *Ariacode*	do.
7. *Eddakara*	do.	18. *Varoor*	do.
8. *Catchaporrah*	do.	19. *Mambaat*	do.
9. *Mannakaat*	do.	20. *Kakatode*	do.
10. *Maroothey l*	do.	21. *Kapil*	Hill.
11. *Poolakottee*	do.	22. *Aripanaad*	do.

23. *Tiroowally* River.

In the Wynaad Talook.

1. *Devaloo*	Hill.	3. *Ponery*	Hill.
2. *Nelyalom*	do.	4. *Poolyode*	do.

5. *Cheraukode* Hill.

In the *Koormenaad* Talook.

1. *Poonoor* River. 2. *Malapooram* River.

In the *Calicut* Talook.

Polwye, *Tiroompaddy*, and *Iroopoomjy* Rivers.

In the *Nedinganaad* Talook.

Pandaloor and *Alliparam* Rivers.

In the *Shernaad* Talook.

Kadaloondy and *Parpanangaddy* on the sea shore.

2. "It is difficult to ascertain the exact number of people engaged in mining throughout the whole Province of *Malabar*, but the best informed persons examined by the Committee do not make it exceed 1,000. Most of these are married, so that probably between 4,000 and 5,000 people derive a portion of their means of subsistence from this source. The population of the *Ernaad*, *Wynaad*, *Neddinganaad*, *Koormenaad*, *Calicut* and *Shernaad* Talooks, in which mines principally exist, by a Census taken in Fusly 1239 (1829-30) was 4,12,279, making the proportion of those engaged in or deriving subsistence from mining speculations only $\frac{1}{90}$ of the whole. Now from Caldclengh's Travels in South America, as quoted in the Quarterly Review* it is learnt that in *Chili*, a country rich in mines of gold and silver, and the population of which is 6,00,000; two-fifths of the people are engaged in mining. It may at first sight ap-

* Vol. xxxii. p. 147.

pear invidious to institute comparisons between *Malabar* and *America;* but when we remember that a search for the precious metals has ever been a favorite speculation with men of all countries, and that there is no want of enterprize among the Natives of India when their own interest is nearly concerned, the small number of persons engaged in mining operation in Malabar, may lead us to form a low estimate of the quantity of gold in the country. Of the 4,000 or 5,000 persons said above to be connected with the mines, few or none indeed, gain their subsistence entirely by this means. It appears in evidence before the Committee, that in the search for gold they employ only these periods during which the weather interferes with the carrying on of agricultural operations. They resort to the beds of rivers in the dry season, and to the hills during the rains, whenever their leisure or inclination leads them, and no instance is known of a person deserting other employments for the exclusive search for gold, another presumptive proof of the general belief of the unprofitableness of the pursuit.

3. " No correct information could be obtained regarding the length of time during which gold mines have been opened in *Malabar.* It is pretty certain that Tippoo attempted to make them a source of revenue during his possession of the country. Mr. Sheffield in his letter which has already been alluded to, states ' that it has ' been well known from the earliest period that gold is produced in ' the province, and the collecting of it has been formed out in *Wy-* ' *naad* and the *Nelamboor* valley for the last forty or fifty years.' In the same document it is mentioned that the Honorable Mr. Duncan, Governor of Bombay, as far back as 1793—drew the attention of the local authorities to the gold mines. The celebrated Dr. Buchanan who travelled through Mysore in 1802-3, casually alludes to gold being collected in the *Nelamboor* valley, and the privilege of collecting it being farmed out to a Nair.* Dr. Whitelaw Ainslie in the first edition of his Materia Medica of Hindoostan published at Madras in 1813, gives an account of the places where gold is found in India which, as it is applicable to the present subject, may be here quoted with advantage. 'Gold-dust has been found,' says he ' in the bed of the *Godavery* and in *Malabar* in the bed of the river which passes *Nelamboor* in the *Irnada* district; it has moreover been procured in very small quantities in *Wynaad,* in the *Arcot*

*Travels in Mysore, vol. ii. p. 111.

District, and in the sand of the *Beypoor* river near *Calicut.* Though the sources are evidently numerous from which this valuable metal can be obtained in the Indian Peninsula, it would seem from the little interest they have hitherto excited, that none of them promised to be very productive.'* We have thus positive proof of the existence of some gold mines for at least forty years. Those at *Capul* have been opened by the Moplays within the last eight years, and those at *Teroomaly* not more than four or five.

4. " In an extract of a paper, dated 9th January, 1829, by Mr. Sheffield, it is stated that in 1801 the gold dust in the *Ernaad* country was farmed for Rupees 1,408-8-0. He mentions also that at the time of writing (1829) the privilege of gathering gold was formed out above the Ghauts for the sum of Madras Rupees 1,250, and below the Ghauts, in *Ernaad*, for Rupees 937-15-4, making a total of Rupees 2,187-15-4. Since 1803, a tax of 33 Rupees a year each has been levied on a certain number of *pauthies* or troughs employed in washing for gold. At present this amounts in *Ernaad* to Rupees 839, which is a falling off of 569 Rupees a year since 1801; and in *Wynaad* to Rupees 1,260. Besides this, the privilege of collecting gold in *Kadaloondy* has within the last two or three years been farmed for Rupees 108; which makes the whole amount now received by way of tax upon gold, paid to the Company, 2,207 Rupees. The smallness of this sum may be adduced as another presumptive proof of the little value attached to the gold mines in *Malabar.* Had their productiveness been considerable, it is not probable that it would have escaped the observation of the active and talented gentlemen who have at different times been employed in assessing the revenue of the province, more especially when we consider that a tax on the precious metals is the fairest possible, as when they are employed as currency it falls upon no body.† Accordingly we find that in the Spanish Colonies a seignorage of one-fifth was levied on the produce of the mines ‡ and Thunberg mentions that in *Japan*, which may in gold contest the palm with the richest country in the world, the Emperor received two-thirds of the quantity collected.§

5. " The Committee in the prosecution of their personal examination of the mines, assembled at *Nelamboor*, a village near the cen-

* Ainslie's Materia Medica of Hindoostan, 1st edit. p. 54. † Mills' Pol. Econ. p. 298.
‡ Mawes' Travels in Brazil passim. § Travels Vol. iv. page 103.

tre of the valley of that name already described, situated on the *Beypoor* river, about thirty miles in a direct line and in a nearly easterly direction from *Calicut.* Having there learnt from Lieutenant Nicolson, that he considered the mines of *Capul,* in the immediate neighbourhood, the best specimen of those in Malabar, they resolved to be guided by the result of their examination of them in forming an opinion of the rest; on the ground, that if they were found to be worth working, they would be the best to commence operations on, and if they were not productive enough to warrant any outlay for machinery, the reasoning applied to them would, *a fortiori*, be applicable to every other place where gold is said to be found.

" The mines at *Capul* are situated about five miles in a south-west direction from *Nelamboor.* The road to them passes through jungle, interspersed with patches of paddy fields which are crossed by causeways. The principal mine is on the side of a small hill which rises with a gentle acclivity to the height of about fifty feet, and which has been completely cleared. The soil is a light sandy clay, the laterite protruding through it in many places. The mine is an excavation about forty feet square, and reported to be about 45 feet deep. It is cut through the laterite which has been already described as the overlying rock of the district, and which is here traversed by veins of quartz in fragments varying much in size. The principal shaft was filled with water to the reported depth of thirty feet, but a small one which was kept free by chatties, was open for the inspection of the Committee. From the report of Lieutenant Nicolson, it appears that the Moplays generally pursue the veins of quartz, and wash the portions of rock and earth composing them, from a belief that they are most productive. The Committee had an opportunity of inspecting the process followed by the Natives in washing for gold. The ingredients removed from the mine are put into a small hollow tray or trough of an oval shape, and resembling in form a Turtle's shell called by the Natives a *Murriya*, submersed in water and agitated with the hand until all the earthy particles are removed. The larger stones are thrown aside, and by repeated washing there at last remains but a small portion of sand. The tray is now inclined to one side and water is poured in with the hand, the sand is gradually washed nearly away, leaving a small portion of a black colour, in which are seen a few minute grains of gold. The larger particles of the metal are removed, and those which are too small to be taken up by the hand are obtained by pouring in a drop of mercury

with which it immediately amalgamates, and from which it is afterwards easily separated by heat. The process with each tray or *Murriya* takes up from about twenty minutes to half an hour. The quantity found in each worked in the presence of the Committee was exceedingly small, but it proved to them satisfactorily, that gold did exist in the spot examined. Lieutenant Nicolson stated to them however that the most productive veins were in the principal shaft which was completely covered with water, and that fair specimens could not be obtained until this was cleared by pumps. Under these circumstances the Committee deemed it expedient to request Lieutenant Nicolson to remain in the neighbourhood of the mines until pumps should arrive from *Calicut* in order to procure favorable specimens of ore for their examination. His answer is given below* and will be more particularly noticed hereafter.

"The number of men employed at this mine was variously reported to be from 300 to 500; from the immense accumulation of waters we may presume that it had been altogether deserted by the natives for a considerable time. The washing before the Committee was carried on by a few of the Pioneers under Lieutenant Nicolson's orders.

"The Committee afterwards proceeded to a small hill opposite to the one above described, where in the midst of jungle they found numerous excavations varying in dimensions some of them apparently from ten to thirty feet in depth. They seem to extend over a space of ground equal to about a square mile. They are worked only during the rains as the want of water presents operations being carried on in them during the dry weather. Unlike the one first described these are confined to the alluvial deposits on the surface, and do not extend into the laterite.

"Next morning the Committee proceeded to examine some mines situated in the bed of the *Beypoor* River near *Mambaat* about seven miles in a westerly direction from *Nelamboor*. They found extensive excavations, from twenty to thirty feet in depth in a bank apparently thrown up by the rivers when swollen by the rains on one side of its channel. The superstratum consists of sand and gravel, below which are large nodules of Quartz and Gneiss, then occurs a

**Extract from Lieutenant Nicolson's letter, dated 13th March, 1833.*

"I beg however to solicit the consideration of the Committee as to the lateness of the season and my dear bought experience that there is no remaining with safety in these jungles beyond the end of March, until when, my health permitting, all the activity i my power may be relied upon."

stratum of sandy loam in which the gold is found diffused in grains. It is said that about 250 Moplays are usually employed in searching for it during the dry weather. About fifty or sixty were at work when the Committee visited it, and they had an opportunity of examining the operation of washing the soil on a larger scale than was exhibited at the *Capul* mines. Instead of the small Trays or *Murriyas*, troughs varying in length from five to seven feet and somewhat more than a foot in breadth, properly called *Pauthies*, are placed over a running stream or small artificial nullah, one end being raised somewhat higher than the other. These are filled with the earth, which is washed by water being constantly poured in at the raised end, and at the same time freely agitated with the hand. Near the other extremity small pieces of bamboos are laid across to prevent the grains of gold being washed away with the earthy particles. The large stones are thrown aside and when nought but sand remains, it is removed into the small trays, and the rest of the operation is the same as that before described. The grains were collected by means of a drop of quicksilver, the amalgam was afterwards wrapped in rag and placed between two pieces of burning charcoal, the heat of which dissipated the mercury and left the gold in a state of purity. The Committee were informed that the various mines formerly mentioned as worked in the beds of rivers, resemble the one above described. During their stay at *Nelamboor* they had also an opportunity of ascertaining as far as one experiment went, the quantity of gold contained in a determinate weight of the earth taken from the mines of *Capul* and *Mambaat*, and the following is the result:

A. Two maunds or 66 pounds of the earth from the upper stratum of the *Mambaat* mine being washed, produced $\frac{1}{4}$ of a barley corn, value $\frac{1}{100}$ part of a Rupee. Touch reported by the Company's Gomastah, $9\frac{1}{4}$. Time occupied in washing, 20 minutes.

B. Two maunds of the lower stratum produced a still smaller quantity.

C. The same quantity of the red earth from *Capul* produced one grain. Time occupied in washing alone, 50 minutes.

D. The same quantity of the red earth from *Capul* produced one grain. Time occupied in washing alone, 50 minutes.

" On this subject it may be allowable to quote the following note from Professor Jamieson's Mineralogy. 'The sand of any river is worth washing for the gold it contains, provided it will yield twenty-four grains in a hundred weight, but the sand of the African rivers of-

ten yields sixty-three grains in not more than five pounds weight, which is in the proportion of fifty times as much.'*

6. "The quantity found by one man per day, by the rude methods of working above described, has been variously stated, and it must be expected to vary according to the industry of the parties, the degree of productiveness and other obvious circumstances. The Natives examined by the Committee state it to be about two grains daily. Lieutenant Nicolson in his answers says, a good workman will collect six grains a day, but mentions the quantity collected by the Pioneers employed under him to be only three grains. They are inclined to think however from all that has come to their knowledge, that one-third of a gold fanam or two grains is a fair average.

"As in the course of this Report repeated allusion is made to the new and old gold fanam, as a measure of weight and value it may be useful to state here the proportion they bear to the more usual standards. The average weight of a new gold fanam is six grains nearly and eighty may be reckoned to the ounce Troy. The touch is $46\frac{7}{8}$ and the average net mint value of 100 pieces is Rupees 24-8-11. The average weight of the old gold fanam is about 5·79 grains; the touch is $47\frac{19}{48}$, and the mint value of 100 pieces is Rupees 24-7-3.

7. "The quantity annually produced is also difficult to be determined. The proverbial unwillingness of a native to state his wealth and the jealousy more especially regarding any interference of the English with the mines, render it almost impossible to gain any correct information on the subject. The quantity sold in the different bazars in *Malabar* and the adjacent provinces, if it could be possible to ascertain it, would be some criterion to guide a calculation, but the Committee have been unsuccessful in their inquiries on this point. One of the most respectable natives examined by the Committee states the annual quantity at forty thousand new gold fanams weight or five hundred ounces. Lieutenant Nicolson says that seven hundred Moplays would collect eight ounces a day. The Gomastah employed by Government to buy up gold asserts, he could purchase about one thousand gold fanams weight in the neighbourhood of *Nelamboor* alone, but from his price being low, this is but a small proportion of the whole produce. Mr. Sheffield mentions that he was informed the annual produce below the Ghauts was 5,200 gold fanams weight, and in Wynaad 6,000, making the total 11,200 or

* Volume III. p.p. 58, 59.

140 ounces troy! Amidst these conflicting statements, a calculation founded on data already admitted, offers the only means of forming even a guess at the actual annual produce. Assuming therefore 1,000 persons to be the number employed in working the mines throughout the whole Zillah, the average produce of each man's labour a day to be $\frac{1}{3}$ of a gold fanam's weight, and the average time each man works to be exactly half the year, the total produce will amount to nearly 61,000 gold fanams weight, or 750 ounces, which at the rate of 35 Rupees an ounce will be worth Madras Rupees 26,250 per annum. From various circumstances brought to the notice of the Committee, and more particularly from the facts which will be adduced in the next paragraph, this is probably far above the reality, but even considering it to be near the truth, it is but an insignificant quantity when diffused throughout so large a population as that of *Malabar*, or when it is compared with the total produce of the globe which is reckoned at a million and a quarter of ounces.

8. " The condition of those connected with the mines in the absence of more direct evidence, will also enable us to form some opinion of their productiveness. Little stress can be laid on the condition of the miners themselves. The accounts of all travellers in America agree in stating the portion of the population employed in the search for gold, to be invariably the poorest and most miserable. In this country, as has been already stated, mining is not pursued as an exclusive occupation: the time not occupied in agriculture is given up to it by a portion of the inhabitants. But these are not in more comfortable circumstances than their neighbours, so far as can be known from the state of their houses, their dress or ornaments. They seem to be enabled merely to purchase a larger portion of Tobacco, Salt and Betel, which to them are actual necessaries of life. Not an instance is known of a person becoming rich by mining. The *Tiroopaad* or petty Rajah of *Nelamboor* who has a large extent of country, his own property, and who pays a tax to Government for the privilege of mining, is said to have acquired a considerable portion of his wealth by the gold produced on his estate. Every grain found is so much gain to him as he exclusively employs his slaves, whom he is obliged to feed at any rate, in the search, and from all accounts he is a hard task-master. His case therefore cannot be considered a fair exception to the above statement of the general poverty of those connected with the mines. Nor can this be owing to the want of industry on the part of the

Moplays and others. The large excavations already described as having been made by them at *Capul*, and the difficulties they have to contend with in keeping the shafts free from water show their perseverance in the search. It may here be asked, why if the profit of mining be so trifling, they continue to employ their labour in this manner? It can only be explained to arise from that natural eagerness which men in all countries show to enter into mining speculations, and by that 'unaccountable infatuation' which often prompts men to desert even the 'less arduous and more wholesome labours of agriculture' for the search after gold and silver.*

"Had the productiveness of the mines been considerable, it is highly probable that in a country where labour is so cheap as in *Malabar*, where a cooly can be hired for a Pagoda a month, and where a thirst for gain is a well known feeling of a large portion of the inhabitants, some person possessed of capital would have invested it in working them—not an instance however is known of a person employing coolies for this purpose. One or two monied men indeed are in the habit of advancing small sums to the workmen, charging interest on the same and buying up the gold at a certain price. But these men though they must be well aware of the actual quantity yielded, have never entered upon the speculation themselves; and we can only ascribe this to a conviction on their part of its unprofitableness.

"In the foregoing short statement of the results of the inquiries regarding the past productiveness of the mines, it will be seen that though found over a large extent of country, the quantity of gold so far as is yet known is in no place great, that the number of people employed in mining bears a very small proportion to the total population of the districts in which gold is found, that those moreover are principally cultivators and coolies, who in this search employ only the time not occupied in agriculture, that the mines though known for the last fifty years have never attracted any marked attention, that the tax levied on them has been trifling, and that in one district at least it has been considerably reduced, that the richness of the earth in the precious ore is far below that which is reckoned encouraging in other countries, that the quantity found by one man daily is barely sufficient to furnish him with the necessaries of life, that the quantity annually produced is trifling when compared with the extent of territory and the population, and that no instance has occurred of native

* (Caldcleugh's Travels in South America: loc. cit.)

capitalists having engaged in the speculation by employing coolies, on their own account. These considerations weigh powerfully with the Committee in giving it as their decided opinion, that the productiveness of the mines is by no means such as to warrant entering upon any operations upon them on a grand scale with European Machinery. They are aware that in this decision, they differ widely from Lieutenant Nicolson. They are far from wishing to accuse that gentleman of any intention to mislead; on the contrary they consider that he has been actuated by a desire to benefit the Government under which he serves. But at the same time they may be allowed to remark that his sanguine and enthusiastic temper seems to have led him to form his opinion of the value of the mines in *Malabar*, more by his wishes than by the facts before him. He has looked on the bright side of the question on all occasions, has always taken the highest average as a guide for his calculations, and has overlooked circumstances, which if properly considered would have convinced him of the futility of his speculations."

II. On the subject of the Machinery required and the expense of working the mines it is unnecessary to follow the report. The Committee estimated the cost of the former at 19,000 Rupees, one item of which—a Steam Engine with buildings—alone amounted to 12,000 Rupees, or including cover for the workmen 20,000 Rupees for the *Capul* mine.

In calculating the produce of the same mine they assumed from the fact already ascertained of the produce of one man's unaided labour being $\frac{1}{3}$ of a gold fanam or two grains per diem, that with machinery it might amount to 10 grains which with 100 men would be 1,000 grains a day. "The principal advantage of Machinery" they observe "lies in the facility of keeping the shafts free from water, the rapidity of bringing the earth containing the gold to the surface, and the washing of a larger quantity at once." They supposed therefore that one man might in this way accomplish the labour of five, and they quote the experience of the South American mines that the application of machinery had trebled the quantity obtained without it. Taking the number of working days then at 24 in the month and not reckoning for several minor items, such as the price of mercury for amalgamating, &c. they give the result of their estimate in the following Table:

Dr. *Per Contra.* Cr.

	Rups.	A.	P.		Rups.	A.	P.
To interest at 20 per cent. per annum, on 20,000 Rupees	4,000	0	0	By produce of 100 Men at the rate of 10 grains per day, each working 24 days in the month at an average throughout the year reckoning the price of Gold at 35 Rupees per ounce	21,000	0	0
,, Pay of 100 men at 3½ Rupees per mensem, for one year	4,200	0	0				
,, Hire of 60 Bullocks at 5 Rupees each per ditto, for ditto	3,600	0	0				
,, Iron, Timber, Smiths, Carpenters, &c. at 350 Rupees per mensem, for one year,	4,200	0	0				
,, A European Superintendent at 300 Rupees per ditto, for ditto..	3,600	0	0				
,, One Assistant ditto at 50 Rupees a month, and 5 Maistries at 10 Rupees each per ditto, for ditto.........	1,200	0	0				
	20,800	0	0				
To balance in favor of the Mines in a year,	200	0	0				
Total Rupees..	21,000	0	0	Total Rupees..	21,000	0	0

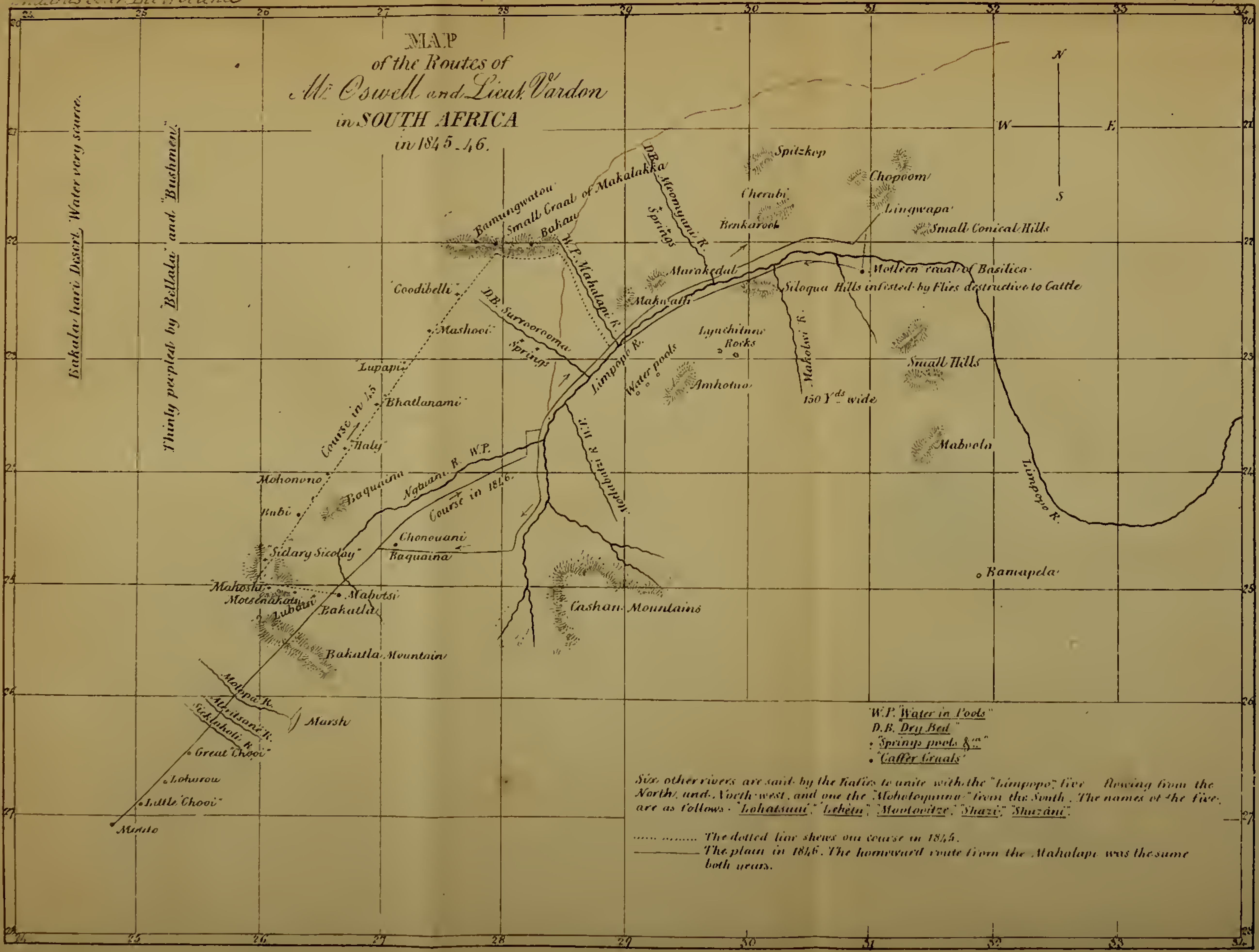
III. With regard to the utility of sending to England for Machinery to work the mines, the Committee state that, "they consider they have clearly proved that the productiveness of the mines is by no means such as to warrant the outlay of a considerable sum, with a very doubtful prospect of profit. But even did the precious ore exist in such quantity as to realize the golden dreams of the most enthusiastic speculator, the unhealthiness of the country in which the mines are situated would weigh as a powerful objection on the minds of the Committee, against recommending the purchase of expensive machinery to work them. In the deep forests and jungles of *Malabar*, during six months of the year, from April to October, a fatal form of fever arising from Miasmata, is apt to attack Europeans who venture to reside in them. Sufficient proof of this has been obtained and a forcible one exists in the letter marked No. 5 from Lieut. Nicolson.* That gentleman has been thrice attacked with fever, and on the last occasion his life was despaired of for several days. Indeed the Committee doubt if any European of skill and acquirements in science, sufficient to enable him to superintend the operations of mining, could be induced, for any salary, to remain in their neighbourhood during the whole year.

"The very time of his absence too, would be that in which the mines could be most conveniently worked from the constant supply of water, and when also the machinery would be most likely to get into disrepair from exposure to the violence of the monsoon. Instances are not wanting to show how soon machinery in this country left under native management becomes totally useless, nor could natives of respectability from other parts of India be induced to undertake its superintendence, for their dread of the jungles exceeds that entertained even by Europeans. The Committee repeat that if every other objection were done away with and proved to be untenable in all points, this consideration alone would induce them to dissuade Government from entering upon the speculation.

"Naught now remains to be remarked on by the Committee, except Lieutenant Nicolson's statement of the existence of gold on the *Neilgherries*, and his suggestion of the propriety of continuing the search in that direction. It has been already surmised that the original deposits of the precious ore are to be found in the *Koondah*, *Mookoorty*, and *Neilgherry* ranges, and if they were discovered at a suf-

* See Note at page 173.

NATURAL HISTORY


MAP
of the Routes of
Mr. Oswell and Lieut. Vardon
in SOUTH AFRICA
in 1845_46.
N
W
E
S
Bakalahari Desert. Water very scarce.
Thinly peopled by "Bellalas" and "Bushmen".
Bamungwatou
Small Craal of Makalakka
Bakau
D.B. Moonyani R.
Springs
W.P. Mahalape R.
Spitzkop
Chopoom
Cherubi
Lingwapa
Benkaroob
Small Conical Hills
Marakedal
Motleen craal of Basilica
Siloqua Hills infested by Flies destructive to Cattle
Coodibelli
D.B. Sarroorooma
Springs
Makwath
Mashooi
Lynchitnne Rocks
Makolwi R.
Limpopo R.
Water pools
Small Hills
Lupapi
Amhotuo
150 Yds. wide
Bhatlanami
Course in 45
Haly
Mabuola
W.P.
Ngwani R.
Mohonono
Baquaina
Course in 1846
Limpopo R.
Bubi
Chonouani
Baquaina
Sidary Sicolay
Ramapela
Mahoshi
Motsenahats
Lubasi
Mabotsi
Bakatla
Cashan Mountains
Bakatla Mountain
Molopa R.
Meritsone R.
Sicklaholi R.
Marsh
Great Chooi
Lohorow
Little Chooi
Mosito
W.P. "Water in Pools"
D.B. "Dry Bed"
"Springs pools &c."
"Caffer Craals"
Six other rivers are said by the Kafirs to unite with the "Limpopo", five flowing from the North, and North-west, and one the "Moholoquana" from the South. The names of the five are as follows: "Lohatsuni", "Lehetu", "Mootovitze", "Shazi", "Shuzani".
The dotted line shews our course in 1845.
The plain in 1846. The homeward route from the Mahalape was the same both years.

ficiently great elevation, the argument founded on the unhealthiness of the country would not of course be applicable to them. But no proof has been adduced before the Committee, of their existence ; no veins have yet been traced in these mountain masses, and Lieutenant Nicolson rests his assertion on the vague report of a native, communicated to him in a letter.

"The Committee on mature consideration of all points and guided more particularly by the conviction on their minds of the usual unprofitableness of speculations in gold mines, derived from a careful perusal of various works on the subject, do not feel justified in recommending the adoption of Lieutenant Nicolson's suggestion."

On receipt of this report the Government, under date 25th October, 1833, ordered the search for gold to be abandoned—a resolution which was approved by the Court of Directors with the following pithy, addition, "that if the Government had directed these inquiries to be made before they authorized the commencement of any operations, a considerable expense would have been saved to them."

VII. *Notice of an Expedition into the interior of Southern Africa, by* Mr. Oswell *and* Captain Vardon, *with a sketch of the course of the* Limpopo, *and a Figure of a supposed new species of Rhinoceros.*

We have much pleasure in presenting our readers with the accompanying sketch-map, for which we are indebted to Mr. Oswell of the Civil Service, showing the extreme points to which he penetrated in the course of two expeditions into the interior of South Africa made in search of game in 1845 and 1846. On the first occasion accompanied by Mr. Murray, he reached the *Bakaa* mountains and returned by the valley of the *Limpopo*. This line nearly coincides with the track of Mr. D. Hume in 1830. In his next journey he was joined by Captain Vardon, and they together explored the course of the *Limpopo* to a greater extent than had been done by any previous travellers. Mr. Oswell was at first led to suppose that the stream pursued a more northerly course, [indicated by the red line in the map,] and he had placed their turning point in the *Lingwapa* mountains somewhere between the 20th and 21st ° S. Lat. But subsequent consideration and the result of a communication from Mr. Living-

stone, the enterprising Scotch Missionary in *Caffraria*, induced him to exhibit the direction of the river as it now stands. "This sketch" observes Mr. Oswell "is not supposed to be strictly accurate. We "laid down the course of the river *Limpopo* as correctly as we could "from the tops of hills, &c., with a compass, but having no other "instrument we are aware that many errors may have crept in and "only hope that others, more carefully provided, may some day or "other give the world a better. The present will at all events "serve to show the wanderer in these parts, where water may be "obtained at a distance from the river and information such as this "even, is not to be despised in Africa."

The *Bekaa* and *Bamungwatow* tribes, whom Mr. Oswell visited in his first excursion, mentioned three other people as living to the north of them, viz. the *Makalakka*, *Mancupani* and *Mashuna.* They were also familiar with the existence of the great Lake and had frequently visited it. They described it as lying in a W. N. W. direction from their location, at a distance of 12 or 14 days journey for a man on foot, (which would be about 300 miles,) or a month with a waggon.

Mr. Oswell adds with reference to the sketch-map, "The lines dotted and plain mark the track of the waggons, but the country was well quartered on horseback for 40 or 50 miles on either side. The *Limpopo* is supposed to reach the sea at or somewhere a little to the North of *Delagoa Bay.*"

It was on the banks of the *Makólwé*, an important tributary of the *Limpopo*, that the travellers first met with the singular animal of which we have given the accompanying figure, the fidelity of which is attested by Mr. Oswell. He describes it as resembling generally the white Rhinoceros *(Rh. Simus)* "except in the formation of the horn, which is longer, much straighter and curved, though but slightly, in exactly the contrary direction: the two specimens of the horn which we brought from the interior, are abraded at the points, on the lower sides, probably from coming in contact with the ground whilst the animal is feeding. When running at speed also or when alarmed, it carries the head very low, as do likewise the other species, and the horn then standing nearly straight out from the nose with a trifling curve downwards, may occasionally strike or rub against the inequalities of the ground."

"From the circumstance of the *Quebaba* being found in the same

BRITISH MUSEUM

neighbourhood, and from its general resemblance to the White Rhinoceros, we at first supposed the peculiarity of the horn to be merely a malformation, but the fact of five having been seen, two of which were shot,—of the *Bechuana* who inhabit the country in which the specimens were obtained, knowing the animal well under a distinct name, and describing it as frequently to be met with, though by no means so common as the other kinds,—together with the circumstance of its being unknown to the south of the Tropic, though the common white Rhinoceros is there found in abundance,—caused us to change our opinion and to consider it as certainly a distinct species." The name *Quebaba* is that by which the *Bechuana* distinguish it from the common white species which they designate *Chakuru*,—the *Mahuhu* of the *Matabili.* Concurring in opinion with Mr. Oswell, that the above facts render the existence of the *Quebaba* as a distinct species, highly probable, we have named it provisionally after its discoverer *Rhinoceros Oswelli.*

In the same neighbourhood they fell in with a most destructive species of Gadfly, which stung the cattle and horses to madness, and in many instances produced such painful sores, as to occasion the death of the poor animals.

We hope to be able to add some farther details of this interesting expedition on a future occasion from Captain Vardon, who has kindly promised to send us a communication on the subject.

VIII. *Memoranda regarding a Boring executed on the Sea Beach, at Madras, in the Months of July, and August,* 1845, *under the orders of the Pier Committee. By* T. G. Taylor, Esq.

Wednesday, 16*th July*, 1845.—A convenient site was selected nearly opposite the Master Attendant's Office at about 30 yards from the margin of the sea and at about 10 feet within the bulwark; this part of the Beach was found to be 13 feet above the lowest low water level and 8½ feet above the highest spring tides.

First day, 10 feet. *Thursday*, 17*th.*—Commenced boring, and on leaving off in the evening found the depth attained to be 10 feet, the soil was dry and extremely uniform in its composition, being ordinary

sand during the day, one small sea shell and two agate pebbles were met with.

Second day, 13 feet 6 inches.

Friday, 18*th*.—The sand was found to be moist at the commencement, and to be freely mixed up with water as the boring proceeded, so that much time was lost in baleing out the accumulating water with the water cylinder. Notwithstanding which a depth of 13 feet 6 inches was arrived at by the evening.

Third day, 17 feet 6 inches.

Saturday, 19*th*.—On commencing operations this day, there was four feet of water in the hold, by reason of which, the auger, although penetrating to a depth of from 12 to 14 inches at each boring, nevertheless, on being brought to the surface, was found to contain but a very inconsiderable quantity of sand; and on being again lowered, 12 out of 14 inches before *apparently* gained was now necessarily lost. It would in fact appear, that the auger although well adapted to boring, was, nevertheless under the present circumstances, not well fitted for removing the sand excavated; a vigorous application of the water cylinder, however, enabled us by the evening to arrive at a depth of 17 feet 6 inches. The soil both to-day and yesterday was extremely uniform, being a coarse sea sand, with here and there one or two minute pieces of broken shell. The borer, from the commencement had been continued in action until the force of four men was insufficient (by reason of the depth attained) to produce further movement, until in fact the auger became *jammed;*—this uniformly occurred after excavating from 12 to 14 inches.

Fourth day, 23 feet, 0 inches.

Monday, 21*st*.—We had now eight feet of water in the hold: hitherto the auger had been accompanied in its downward progress by 2 nine inch protecting cylinders of Iron (placed end on end,) each of 9 feet in length; these being very heavy, a small force only had been necessary in addition to their own weight to make them keep pace with the auger, but we now begin to find that increased depth renders this a matter of difficulty—by the evening we had arrived at a depth of 23 feet; but the protecting cylinders had stuck fast. The soil,—ordinary coarse sea sand, towards evening was distinguished by being mixed up with minute glittering particles (probably Mica.)

Fifth day, 24 feet 3 inches.

Tuesday, 22*nd*.—We had now $12\frac{1}{2}$ feet of water in the hold—continued hammering—lowered the pro-

tecting cylinder nine inches, after which all attempt at sinking them deeper was given up and the auger and water cylinder continued in action throughout the day. The soil—coarse sea sand,—as hitherto; and, from the quantity brought up a depth of 28 feet should have resulted, but at no time during the day did we exceed a depth of 24 feet 3 inches, making it plainly appear, that although sand may be excavated until the whole Beach be undermined, still a greater depth than that now arrived at cannot be attained without the protection of a cylinder to accompany the auger; notwithstanding this, a depth of 14 inches was all that could be reached by the auger when worked by five men—showing, that the soil although permeable to sea water, is still capable of resisting in an eminent degree the advance of solid bodies.

Sixth and seventh day, 33 ft. 0 in.

Tuesday, 29*th*, *and Wednesday*, 30*th.*—Having completed the manufacture of an Iron cylinder of 23 feet in length by 6½ inches diameter, it was lowered within the 9 inch cylinders hitherto employed, and boring recommenced. In the course of the day, as the smaller cylinder began to descend, the larger one likewise began gradually to settle, and during this and the following day (in proceeding from 24 to 34 feet) the two cylinders continued to advance simultaneously with the progress of the boring.

Eighth day, 34 feet 10 inches.

Thursday, 31*st.*—The cylinders had becomes luggish in their movement and consequently a corresponding small depth of boring only was effected, viz. (1 foot 10 inches) although a large amount of sand had been brought up by the water cylinder.

Ninth day, 44 feet 3 inches.

Friday, *August* 1*st.*—The large amount of excavation, effected yesterday, rendered the descent of the cylinders this day most decided. The soil consisted of layers of sea sand with broken shells and stiff black mud;—the borer was unable to penetrate beyond a depth of 10 inches into the soil, notwithstanding which, the progress made by the water cylinder was most rapid, in as much as a depth of 9 feet 5 inches was gained during the day, the cylinders settling a little but not quite keeping pace with the borer.

Tenth day, 47 feet 3 inches.

Saturday, 2*nd.*—The larger cylinders advanced very sluggishly to-day, and notwithstanding a large amount of excavation was effected we had only gained three feet during the day, or had arrived at 47 feet 3 inches from the surface soil consist-

ing of sea sand and minute broken shells with a larger proportion of black mud—small cylinder, which had not moved, only reaching to 42 feet, or 5 feet 3 inches short of the boring.

Eleventh day, 48 feet 3 inches.

Monday, 4th.—In the interval from Saturday night to Monday morning the large cylinders had sunk about 2 feet, and in the course of deepening the pit between 7 and 10 A. M. a further sinking to the amount of 18 inches took place. On sounding, it appeared that 5 feet 3 inches of soil had made its way into the boring,* or up to the lower edge of the small cylinder since Saturday night. On using the water cylinder the whole of this accumulation was removed in little more than an hour, and at 11 A. M. (depth 48 feet 3 inches) it appeared that 6 feet 3 inches had been gained in 1 hour 45 minutes, further progress was now prevented by the surface soil having fallen in at the top in consequence of the sinking of the upper cylinder. The black mud above alluded to, which seems to merit particular attention, commences to make its appearance at about a depth of 35 feet, and although at this point its amount is small in comparison with the sand with which it is mixed up, still it appeared to modify to some extent the advance of the cylinders, at a depth of 42 feet the soil had become extremely dark coloured, and here for the first time since the commencement of the boring we were able to make a considerable advance with the borer (to the amount of 6 feet) beyond the end of the cylinder, the tenacity of the soil being such as to arrest its further progress. The auger employed during the latter part of the boring, although smaller than that used at its commencement, could with difficulty be screwed into a depth of 10 inches, showing that in its natural or compressed state the soil was well calculated to withstand pressure or other imposed force.

From a rough examination of the mud at the depth of 47 feet, it appeared to consist of 20 per cent. of sea sand, the remainder being made up of Aluminum, Carbonate of Lime and Humus, but the mechanical qualities of the soil rather than its chemical composition being the object of inquiry, no more accurate analysis has been thought necessary.

* This breaking down or infiltration of the soil into so large an aperture is a result which might naturally be expected to occur under the circumstances in any alluvial soil however stiff its composition.

Biographical Memoir of the late William Griffith, Esq., F. L. S., *Assistant Surgeon, Madras Establishment.*

The cessation of this Journal for nearly two years has prevented an earlier notice of the subject of the following Memoir. It is not however too late to record a tribute to the private worth and public fame of one, whose connection with this Presidency and service, we have justly reason to be proud of. Genius confers glory not only on its possessor but on all related to him, on his country—his family—and on the community to which he more especially belongs. Such an interest we feel entitled to claim in the memory of William Griffith, who, unpatronised and unbefriended, zealously devoted himself to the study of nature and to a laborious course of physical research, by which he achieved a reputation in the higher walks of science, more readily appreciated by the philosophers of Europe* than acknowledged (until too late) by his countrymen in the East. And this too, derived from the first fruits of his exertions only,—cut off at the early age of 34,—before time was allowed him to reap the rich harvest of his many toilsome journeys and patient investigations!

William Griffith was born at Ham in Surry sometime in March 1810, and entered the service of the East India Company as an Assistant Surgeon on the Madras Establishment on the 24th September, 1832. From his earliest boyhood he evinced a taste for Botany, the pursuit of which was much encouraged in the family of the private Tutor, where with his brothers, he received the first rudiments of his education. When more advanced in years, he was in the habit of traversing the country with a wallet at his back, in quest of plants, and always returned with large additions to his *herbarium*. His more mature studies were completed at the London University, where he continued to display the same predilection for Natural History and particularly for his favourite branch of it, which he cultivated under the instructions of Robert Brown and Lindley, and obtained the Linnæan Gold Medal of the Society of Apothecaries, in the Botanical class of 1830. His first service after his arrival in India, was in medical charge of the military post at Mergui, but he did not long remain under the orders of his own Presidency. In 1835 he was de-

* He was, without any solicitation on his part elected a Member of the Imp. Acad. of Bonn; of the Roy. Acad. of Sciences of Turin; of the Roy. Botanical Society of Ratisbon, &c.

puted by the Supreme Government in company with Drs. Wallich and M'Clelland to examine the vegetable productions of Assam and more particularly to inspect the tea-plants said to be indigenous to that province, on which he furnished a report of great value and full of scientific research. Here he attracted the notice of Captain Jenkins, Commissioner in Assam, who begged that he might be permanently attached to the Agency, and shortly afterwards, on the 15th October, 1836, deputed him to explore the Mishmee mountains and the valley of the Burrumpootra or Lohit, from which expedition, (a sketch of which was printed in the VI. Volume of the Journal of the Asiatic Society,) he culled a rich botanical harvest. He next proceeded with Major White the Political Agent in Upper Assam to meet certain Burmese Commissioners on the boundary of the two territories, for the adjustment of various frontier disputes, but after two fruitless endeavours to accomplish this object, Major White relinquished the attempt as hopeless. Mr. Griffith however determined to persevere, and on the last occasion, in the early part of 1837, proceeded alone from Suddya, into the Burmese territory, with the hope of joining Doctor Bayfield, who had been directed to advance simultaneously from Ava to the place of rendezvous, in company with the Burmese officers. After numerous difficulties and dangers his perseverance was rewarded by success. He met Doctor Bayfield, accompanied him back to Ava, and returning thence by way of Rangoon with despatches from the Resident, proceeded to Calcutta where he arrived in June, just as the news of his assassination had been made public, from official information transmitted to the Government two months before.

The embassy to Bootan under Major Pemberton was on the eve of departure. He was appointed to it as medical officer, but indefatigable in the pursuit of knowledge, he proceeded in July, in advance of the party, to complete his examination of the Kasyah Hills, after having in the short interval preceding his departure, arranged his collections, rich both in botanical and zoological acquisitions, and drawn up an interesting memoir of his adventures for the Government. He joined the embassy at Goalpara and continued with it from the 21st December, 1837, when it set out from Gowahatti till its close. His account of their proceedings is contained in a Journal published in the VIII. Volume of the Journal of the Asiatic Society.

In November, 1839, within four months after his return to Calcutta,

he joined the Army of the Indus and thoroughly investigated the botany of Affghanistan, not neglecting at the same time its zoology, meteorology and statistics, for the illustration of all of which, he amassed copious materials. It was at this period that his naturally strong constitution, shattered by the privations of his former journeys, received a severe shock from illness brought on by indefatigable devotion to his pursuits, and the attack was so severe as at one time to lend currency to a report of his death. Returning to India in 1841, he resided for a short time at Simla and from thence paid a visit to Jubbulpoor, where his brother was then stationed and where his experienced eye detected a new character of vegetation, so different from the regions he had already examined, as to make him regret deeply the necessity that obliged him to leave the valley of the Nerbudda unexplored. In August of the same year he was appointed Civil Surgeon at Malacca, but a twelve month had scarcely elapsed ere he was recalled to take charge of the Botanical Garden at Calcutta, and to act as Professor of Botany at the Medical College (in August, 1842) during the temporary absence of Dr. Wallich at the Cape. On being relieved in December, 1844, by the Superintendent's return he rejoined his humble appointment in the Straits, but had scarcely arrived there when he was attacked with a fatal illness and fell a victim to disease of the liver on the 10th February, 1845.

From this rapid sketch it will be seen that his whole life was one continued round of unremitting and laborious action which left him with scarce a moment's leisure for the generalization of his discoveries. Yet these were not neglected. The able reports of his political duties submitted to the Government of India, and the scientific memoirs that have appeared in the pages of the Linnæan transactions, in those of the Agri-Horticultural Society, in M'Clelland's Journal of Natural History, &c.—papers furnished in the brief intervals of his several journies, at the same time that he was occupied in the packing and transmission of his collections to the East India House, often whilst labouring under illness the effect of fatigue and exposure,—sufficiently attest his industry and zeal. In addition to all this he kept up an extensive correspondence both Indian and European, the latter including the first Naturalists of the age,—and such names as Mr. Robert Brown, Sir W. Hooker, Dr. Martius, Professor Lindley, Dr. Nees von Esenbeck, M. Decaisne, Mr. Solly, Dr. Wight, Mr. Lemann, &c.

It appears to have been the great object of his ambition to have

given a complete view of the *flora* of Southern Asia. For this his own personal researches had furnished him with an immense mass of new material, and it is deeply to be deplored that he was not permitted to accomplish his design. It can hardly be expected that any other person will be able to bring to the task an amount of scientific knowledge and individual experience, at all approaching the extent, to which these eminent qualifications were combined in him. For he was no common observer of superficial forms or mere collector of isolated facts. He had penetrated deeply into the unexplored arcana of vegetable physiology. His patient and assiduous microscopic investigations of the structure and functions of plants had enabled him to throw new light on the economy of vegetable life. From his own personal observations he had noted the geographical distribution, the climatology and other characteristics of the various classes of plants from the Paropamisan Mountains to the Golden Chersonesus. The few admirable treatises on detached subjects which he found time to give to the world, serve to show how great would have been the value of his discoveries and speculations when applied to a larger field.

Added to these eminent philosophical qualities he possessed in a high degree, that sagacity and sound judgment which enabled him to form correct views of the common affairs of life. Warned by the symptoms of smouldering discontent which his habits of observation detected during his excursions among the rude tribes beyond the Indus, he early foresaw and made known to the higher authorities, the probable results of the line of policy pursued in Affghanistan,—which led to the fatal tragedy of Cabul. But his warnings, uttered during the spring tide of success, proved unpalatable and did their author no good.

In private life his kindness of heart and amiable disposition gained him the affectionate regard of all who knew him, whether equals or dependants. The love he inspired in the breasts of those who were more particularly honored with his friendship is strikingly apparent in the language of the various testimonials to his worth which appeared after his death. The natural ardour of his temperament, which induced him to brave every risk and privation in the furtherance of his favorite pursuits, led him to join in the assault of Ghuzni, for which he received a medal, and his contempt of danger frequently brought him into hazardous collision with the people of the uncivilized tracts which he was engaged in exploring.

It might have been supposed that the services of such a man would not only have been eagerly employed by the Government he served, but would have led to honor and emolument and to the enjoyment of that leisure so necessary for the elaboration of philosophical speculations. Such however was not the case. And this is the more extraordinary as the latter years of Mr. Griffith's life were passed under the auspices of a nobleman who more than any other Governor General extended his patronage to scientific pursuits. Whether it be from prejudice or indifference or ignorance or from whatever other cause, certain it is, that such avocations are considered to form the peculiar province of foreigners and to be altogether unsuited to the English character. While the rare merits of Mr. Griffith were overlooked and he was painfully pursuing his unaided researches on the pittance of an Assistant Surgeon's pay, a foreigner of infinitely inferior pretensions was placed at the head of a scientific expedition to the Tenasserim Provinces on a salary of 1,300 Rupees a month with every collateral support and assistance.

It is from the same cause that notwithstanding the unparalleled facilities afforded by British domination in India, the harvest of discovery has been so largely reaped by strangers whilst Englishmen have been content to look supinely on. Hence the just celebrity attaching to the names of Sònnerat, Leschenault, Duvaucel, Diard, Delessert, whose labors were promoted and encouraged by their own Governments and by the learned societies to which they belonged. While during the same period the indifference of scientific bodies and public men among ourselves, overlooked the opportunities of turning to account, the talents and exertions of a Buchanan, an Anderson, a Jack, a Griffith, a Hodgson.

The evidence borne to Mr. Griffith's merit since his death, has been as general as the regret for his untimely loss has been sincere and deep felt. His friend and fellow laborer Dr. M'Clelland at once announced the abandonment of the Calcutta Journal of Natural History on account of the loss of its most able supporter and proposed to devote the unsold copies to the formation of a fund for the publication of his extensive Manuscripts. He was subsequently however prevailed on to continue the publication, and he soon afterwards published the Memoir of his life, which couched in language of generous enthusiasm, appeared in the IV. Volume of the Agri-Horticultural Society's Journal.

The *Friend of India* announcing the melancholy intelligence of his death observed that "in him the science of Botany has lost one of its most ardent and successful votaries. There can be no hesitation in asserting that he was unquestionably the most eminent Botanist in the East. No man in our days has pursued his botanical researches over so extensive a field.

* * * * "His loss will be deeply deplored in the Scientific world, in which he enjoyed so distinguished a reputation. His zeal in the pursuit of botanical knowledge was genuine, and unalloyed by inferior considerations. He had all that simplicity of character which is so constantly found in combination with true genius. His attainments in the science to which he devoted his energies, were of the very first order; and if his valuable life had been spared there can be little doubt that he would have made the most important additions to the Botany of the East. But though his loss to the public interests will be great, it will be still greater to his friends and connections whose esteem he commanded by his high and noble sensibilities, and whose warmest affections he secured by his amiable and benevolent disposition.

"The melancholy thoughts which crowd on the mind on this occasion are increased by the reflection that scarcely three months had elapsed since he entered into the most tender connection of life, and that his death consigns a youthful wife to unexpected and premature widowhood."

Again on another occasion the Editor writes: "The value of his labors did not consist so much in the vast collections of new plants he was enabled to make, as in his philosophical researches on vegetable impregnation, and the progressive development of organs, to which his unremitted attention was given, but which he was not permitted to complete. Yet, if we confine our view to the extent of his labours in exploring the *flora* of unknown regions, beyond the limits of Hindoostan, we may say without exaggeration that no individual has ever been able to accomplish so much in so short a time. The number of countries which he traversed during the period of his Botanical enterprises, which may be reckoned from 1833 to 1842 is of itself enough to fill one with surprise. His travels extended from the southern limits of Mergui, to the heights of Bamean and the snows of the Caucasus. They embraced the Tenasserim Provinces, Assam, the Northern Division of

Burmah, untrodden before by any civilized being, Bootan, Affghanistan, Khorasan, and the Peninsula of Malacca. During his progress through these various countries he was exposed to difficulties and privations, and to the most eminent hazard of health and life. Through these trying scenes he was successfully carried by his indomitable courage, and by that spirit of scientific enthusiasm which was one of the most prominent features of his character. No man has ever joined such extensive opportunities of enlarging our knowledge of the *flora* of the east; and his success was commensurate with his opportunities. Had he encountered such dangers and privations in different and widely separated countries, and secured success through the same display of courage, energy and perseverance, in a military expedition, he would have 'had a Gazette to himself,' and have been honored with stars and pensions."

Soon afterwards on the annual distribution of prizes at the Medical College on the 27th March, Sir Henry Hardinge in addressing the Students alluded to the feeling terms in which the Secretary of the Institution (Dr. Mouat) had adverted in his report to the loss sustained by the College in the death of their late distinguished Professor. His Excellency observed that he had heard Dr. Griffith spoken of as a valuable public officer, and his name mentioned in every quarter as a man of eminent scientific attainments, like whom few had ever come to India.

Lord Auckland also when as President of the Royal Asiatic Society, he delivered his address at the Anniversary Meeting of the Society on the 17th May, incorporated with it a short but discriminating and highly honorable sketch of Mr. Griffith's life, commencing in the following terms. "Mr. Griffith was one of the most accomplished Botanists of our days ; with the most accurate and extensive acquisition of learning in his department, he combined a spirit of activity and enterprise, such as has been rarely equalled, great talents, and a very remarkable power of labor, arrangement, and application."

The last tribute we shall notice is that offered to his memory by his fellow Officers of the Medical Service at Madras, a few of whom in acknowledgment of the honor conferred upon their body by one so eminent in every professional acquirement, have procured the erection of a mural tablet in the Cathedral Church of St. George at that place, bearing the following inscription :

Sacred to the Memory of

WILLIAM GRIFFITH, Esq., F. L. S.

Madras Medical Service,

Born at Ham, in the County of Surry, March, 1810,

HE HAD ATTAINED TO THE HIGHEST EMINENCE IN THE SCIENTIFIC WORLD, AND WAS ONE OF THE MOST DISTINGUISHED BOTANISTS OF THE AGE.

HE ACQUIRED HIS KNOWLEDGE BY PERSONAL INVESTIGATION IN THE DIFFERENT PROVINCES OF BRITISH INDIA, AND IN THE NEIGHBOURING KINGDOMS, FROM THE BANKS OF THE HELMUND AND OXUS, TO THE STRAITS OF MALACCA, WHERE, IN THE CAPACITY OF CIVIL ASSISTANT SURGEON, HE DIED 9TH FEBRUARY 1845, IN THE 35TH YEAR OF HIS AGE, AND THE 13TH YEAR OF HIS PUBLIC SERVICE IN INDIA.

HIS EARLY DEATH IS DEEPLY DEPLORED BY NUMEROUS PRIVATE FRIENDS, AND HIS LOSS TO THE CAUSE OF SCIENCE ELICITED A PUBLIC AND EMPHATIC EXPRESSION OF REGRET FROM THE GOVERNOR GENERAL OF INDIA.

THIS TABLET IS ERECTED AS AN HUMBLE TRIBUTE TO HIS MEMORY, BY A FEW OF HIS MEDICAL BRETHREN, OF THE MADRAS SERVICE.

The following list of his publications is derived chiefly from Dr. M'Clelland's Memoir.

Botanical.

1. On the Family of Rhizophoreæ. Trans. Med. and Phys. Soc. Calcutta, 1836, vol. viii.
2. Description of two genera of the Family of Hamamelideæ, two species of Podestemon, and one species of Kaulfussia. Asiatic Researches, vol. xix. 1836.
3. Muscologia Itineris Assamici; or description of Mosses collected during the journey of the Assam Deputation in the years 1835 and 1836. Proceedings of the Linnæan Society 1838, Calcutta Journal of Natural History, vol. ii p. 465, vol. iii. p. 56, p. 270.
4. Remarks on a collection of plants made at Sudyah, in Upper Assam, from April to September, 1836. Journal of the Asiatic Society, vol. v. p. 806.

5. Some remarks on the development of Pollen. Journal Asiatic Society, vol. v. p. 732.
6. Description of Grasses which form part of the vegetation of the Jeels of the Sylhet Districts. Journal of the Asiatic Society, vol. v. p. 570.
7. On the structure of ovula in two species of Ephedra.
Ditto in some Orchideous plants.
Ditto in Callipeltis and Galina. Proc. Linnæan Society 19th January, 1841, No. xi. p. 90.
8. Ditto on Santalum and Osyris, o. c. No. xiv. p. 121.
Ditto in Isoetes capsularis, Roxb. showing the sporules or seeds to be produced from the division of a simple cell, or its contents, and that several sexual distinctions do not exist, as received by botanists, either in Isoetes or Azolla. l. c.
9. Report on the Tea Plant of Upper Assam. Transactions of the Agri-Horticultural Society of India, vol. v. Calcutta, 1838.
10. On some plants, mostly undescribed, in the H. C. Botanic Gardens, Calcutta. Cal. Journal Nat. Hist. vol. iv. p. 375.
11. Palms of British India. Cal. Journal Nat. Hist. vol. v. p. 1, 211, 245.
12. On Azolla and Salvinia. Cal. Journal Nat. Hist. vol. v. p. 229.
13. On some plants in the H. C. Botanic Gardens. Cal. Journal Nat. Hist. vol. v. p. 355.
14. On the development of the ovulum of Santalum and Loranthus. Transactions of the Linnæan Society, vol. xviii.
15. On the ovulum of Santalum, Osyris, Loranthus, and Viscum. Transactions of the Linnæan Society, vol. xix. 171.
16. Some account of the Botanical collection brought by Dr. Cantor, from the Eastward. Asiatic Researches, vol. xxi.
17. On the Black-dye plant of the Shans, and on the Gutta Percha, or Gutta Tuban. Journal of the Agri-Horticultural Society of India, vol. iii. p. 143.
18. An attempt to analyse Rhizantheæ, &c. Proceedings Linnæan Society, 1844.
19. On a few plants from Central India. Cal. Journal of Nat. Hist. vol. iii. p. 361.
20. On the root parasites referred by authors to Rhizantheæ and on various plants related to them. Transactions of the Linnæan Society vol. xix. 103.
21. Note on the development of the ovulum of Osyris. Ibid. p. 487.

22. On the development of the ovulum in Avicennia. Trans. Lin. Soc. vol. xx. 1.
23. On the Indian species of Balanophora and on a new genus of the family Balanophoreæ. Ibid. p. 93.
24. Notes on the Botanical geography of the Tenasserim Provinces. Cal. Jour. Nat. Hist. vol. viii. p. 72.

Political and Statistical.

1. Journal of a Mission to Bootan 1837-38, communicated from the office of the Pol. Secy. to Government of India. Journal Asiatic Society, vol. viii. p. 208, 241.
2. Journal of a visit to the Mishmee hills in Assam. Journal Asiatic Society, vol. vi. p. 325.
3. Extracts from a report on subjects connected with Affghanistan, communicated from the office of the Political Secretary to the Government of India. Journal Asiatic Society, vol. x. p. 797.

Besides which he was engaged in editing Dr. Voigt's Hortus Suburbanus Calcuttensis ; the posthumous papers of the late Mr. Jack and Dr. Roxburgh's work on Criptogamous Plants, the two latter in M'Clelland's Journal of Nat. Hist. vols. iv. and v.

His unpublished M. S. S. extend to nearly twenty folio volumes, half of which contain botanical drawings and descriptions of plants. The remainder consist of narratives of his various journeys, with full details of his botanical researches,—observations on the natural productions and statistics of the region generally, measurements with the barometer to determine heights and astronomical observations to fix the situations of places.

His collections of plants which were very extensive were distributed chiefly according to the countries in which they had been made, but some of the natural families in which he felt most interested were arranged generally. He had formed a separate collection of mosses and ferns, duplicates of which had been forwarded to Sir W. Hooker and Mr. W. Harvey.

On his second departure to Malacca he left in Calcutta specimens of nearly 8000 species, all carefully labelled for future reference and study, whenever he should be appropriately settled ; besides which large collections had in like manner been left in the Straits, when he came to Calcutta, all of which were independent of the copious supplies transmitted from time to time to the East India House, and of sets of duplicates furnished to scientific friends at home.

The whole of the above he bequeathed to the Court of Directors, with a request that his friends Sir W. Hooker, Mr. Lemann, and Mr. Bentham might be allowed to arrange them,

Of his zoological acquisitions, the quadrupeds and birds particularly those obtained in Affghanistan, many of which are new to science, have been lodged in the museum of the E. I. House. A notice of some of his entomological spoils by the Rev. F. Hope, has been given in the XVIII. Volume of the Linnæan Transactions and an account of the fresh water fishes obtained by him in various localities, drawn up by Dr. M'Clelland, will be found in the Calcutta Journal of Natural History, vol. ii. p. 580, and vol. iii. p. 283.

NOTICES.

Professor Lee on the Cufic Signatures in the Copper Grant of the Syrian Christians.

We have been favored with the following Extract from a letter by Dr. Lee, Professor of Hebrew at Cambridge, on the above subject.

The Madras Journal which you were so good as to send me, gives a very exact copy of this Cufic impression (Vol. xiii. Plate viii.); and, at page 143, a decipherment of this is given, on the whole, I think, very correctly. In one or two instances, however, there seems to me to be room for amendment. The notes here, which proceed perhaps from the Editor, translate this decipherment thus: "The first word," says this writer, "which is wanting may be هذا the reading would then be *Meimum* son of *Ibrahim* arranged this for you." But I cannot see, how هذا يد الك ميمون can mean, "*Meimum* arranged this for you." I can find no instance in which يد is used as a verb, or, as a noun, having the sense of arranging. I should rather think that, if we are to take هذا as the first word of this plate, some such verb as بذل should follow it, thus الك ميمون بن ابراهيم هذا ذل يد meaning, "*Meimum* the son of *Ibrahim* bestowed this munificently upon thee;" &c. which should still require some additional matter to have proceeded. Or if لذو was the preceding word,—which appears to me not unlikely,—then the place would read thus يد الك ميمون بن ابراهيم الذو &c. "*Meimum* the son of *Ibrahim*, the power is thine, or for thee;" that is, over whatever had previously been

mentioned as granted.* The plate then goes on, "and *Mahommed* son of *Mania* has borne witness," &c. I doubt whether الحزرمات is the true reading of the fourth line. I am tempted to think that الحورمان *alhūrmān* or something like it, would be nearer to the Cufic. At any rate *Ali Hazramat* can be a correct translation of neither. It must be "*alhazramat*" according to this deciphering "*Ali*" is perhaps an error of the press. In the beginning of the 7th line the proper name has not been made out. It seems to me to be الصنفي or الصيفي or the like; *i. e. alsanafi* or *alsaifi*. I see no reason to object to any thing else occurring in this inscription. The Mahommedan histories of the times of this grant may possibly supply some information as to the persons here mentioned. I do not however remember to have met with any such.

Major Rawlinson on the Intermediate Signatures of the Syrian Plates.

On the first publication of the fac similes of these plates, we transmitted a copy of them to Major Rawlinson, who then stated his belief that the final characters were a form of Pehlevi and promised a further communication after he had made a more careful examination of them. In his paper on the Behistun Inscriptions in the 10th Volume of the Asiatic Society's Journal he describes the early cursive character which he supposes to have been in use among the Persians antecedent to the introduction or rather invention of the Cuneiform alphabet, and then continues in a note: "In the names of the Parsi witnesses attached to the copper sasanam, which is at present in possession of the Syrian Christians of Malabar, we have probably an interesting specimen of the Pehlevi character, as it was carried to India by the first emigrants of the Zoroastrian faith, when they fled from the Arab army on its approach to Abilah, at the mouth of the Euphrates, and sought refuge at Sindān, a town on the coast of Guzerat, well known in Arab geography, but which, without this direct testimony of Hamzah Isfahani, we should have some difficulty in recognizing in the Saint John of the modern maps."

The above singularly corroborates the following observation of

* It must be borne in mind that the grant was conferred by the Hindu Sovereign of Malabar, and that the names following it were those of the subscribing witnesses—Jewish, Arab and Persian Merchants of the same place. ✠

Dr. Gundert's in a letter dated March, 1845, and received subsequent to the publication of his paper. "When I wrote about the name Tarisa, I was not yet aware that Tarsā ترسا signifies a "Christian" in Persian. This agrees then with Cosmas' description of Christianity in Malabar and Ceylon, as originating with Persian merchants."

In the same letter he further remarks "I have become convinced by a perusal of Anquetil du Perron's Journals that the last plate is lost to us. He begins a list of Malayalam names, as witnesses subscribing to the document—with *Vel cula Sundara*, the next name is *Vijaya Narayana*, many others follow. The plates as we have them close with the word விசைய [*Vijaya*]. My translation of the preceding sentence is therefore incorrect. It ought to be: 'agreed to and subscribed by *Vel cula Sundara*.' Anquetil du Perron has his account of the documents from a Sanscrit version, in the hands of Syrian Clergymen. This may perhaps still be in existence in Travancore though the plate is lost."

Temperature of the Earth in Travancore.

The following mean results of a series of observations of the temperature of the earth made by Mr. Caldecott at Trevandrum were exhibited by Prof. J. D. Forbes at the 17th Meeting of the British Association for the advancement of Science in June last.

	Air.	3 Feet.	12 Feet.
January, - - - - -	78·9	85·0	85·5
February, - - - - -	83·4	16·6	85·8
March, - - - - -	82·7	88·8	86·4
April, - - - - -	83·4	89·6	86·9
May, - - - - - -	81·6	88·4	
June, - - - - -	79·9	85·0	86·9
July, - - - - - -	79·4	83·2	86·5
August, - - - - -	79·0	83·6	85·9
September, - - - - -	80·0	84·6	85·6
October, - - - - -	79·1	84·7	85·7
November, - - - - -	79·7	84·6	85·7
December, - - - -	78·0	84·2	85·6
	80·0	85·7	86·0

Professor Forbes exhibited also curves showing the mean changes of the temperature of the air and of the earth at different depths through the year, which indicated clearly two maxima and two minima corresponding to the two summers and two winters of Trevandrum; the lowest

minimum occurring in the rainy season. He concluded by some general remarks to the effect that the results are confirmed by observations on the temperature of springs and wells at Trevandrum, which have been communicated to him by Major General Cullen, and that from these facts it was easy to infer that the phenomena of the propagation of heat into the ground near the equator resemble those of the temperate latitudes, though modified in character and extent. Mr. Caldecott's experiments establish also the unsoundness of the conclusion of M. Boussingault, at least for the Eastern hemisphere, that the annual temperature near the equator remains unchanged at a depth of one foot below the surface in the shade :—a mistake the more important to correct because M. Poisson has tried to confirm his theory of heat by applying it to explain this alleged fact. These observations also establish incontestably the considerable excess of the temperature of the earth above that of the air; the latter being in its mean quantity rather below than above 80°. In both these particulars the observations of Mr. Caldecott are confirmed by those of Captain Newbold, of the Madras Army, in a paper lately published in the London Philosophical Transactions.

Athenæum, No. 1027, *page* 712.

Barometrical Levellings in the Madras Presidency.

At the late meeting of the British Association, Colonel Sykes exhibited and explained two maps constructed by Major General W. Cullen, of the Madras Artillery, comprising five sections of country, showing the relative levels, by barometrical observation, at distances varying from 10 to 20 miles.

One section extended from Cape Comorin to Multai, at the source of the Tapti, a distance of about 1170 miles, proceeding through Madura, Trichinopoly, Bangalore, Hyderabad, and Nagpore, to Multai. Another from the Caves at Ellora to Masulipatam through Jaulnah, Beder, Golconda, Condapilly, to Masulipatam, being a road distance of 545 miles. The second map contained three sections: one from Nagpore to Jaulnah, through Oomrawuttee, of 265 miles; another from Goa to Bellary, through Belgaum and Dharwar, 280 miles; and a third from Mysore to Madras, through Seringapatam, Bangalore, Vellore, and Arcot, road distance 293 miles. A third map gave barometrical sections from Madras to Bellary, on a line about W. N.

W. 244 miles; and from Bellary to Iddamaeul, on a line about W. by S. 156 miles. This map, without pretending to be a complete geological section, showed the prevailing rocks on the route. Associated with the sections were notices of the climate and mortality at most of the principal stations; comprising the maxima, minima, and mean pressure of the barometer for some years,—the maxima, minima, and mean indications of the thermometer,—the falls of rain, the nature of the monsoons,—and the sickness and per-centage, mortality of the European and Native troops. The whole of these laborious results indicated no ordinary industry and judgment. Colonel Sykes' object in exhibiting the sections was to call the attention of railway Engineers to the use of the barometer as the precursor of the Theodolite in determining the general levels of a country, with a view to the selection of lines. He suggested also that Geologists might use the barometer to fix the height above the sea of the strata described. He stated that in the tropics the moderate oscillations of the barometer admitted of levels being determined with some accuracy even when the instrument was used independently; but that when the instrument used had been previously compared with a standard barometer, and that contemporaneous observations were made, he could testify from his own experience that a height so determined might not differ 10 feet, when re-tested or re-observed after a lapse of years.

Athenæum, No. 1029, *p.* 771.

Proceedings of the Madras Literary Society and Auxiliary of the Royal Asiatic Society.

At a Meeting of the Managing Committee held on Tuesday evening the 21st January, 1845.

Read a letter from Messrs. W. H. Allen and Co., dated 18th October, 1844, enclosing a Bill of Lading and Invoice for a case of Books consigned to the Society on the "*Emerald Isle.*"

Read the following letter from Captain R. Gill.

To

The Secretary to the Literary Society, Madras.

Sir,

I have to apologize for the long delay which has occurred in answering your kind communication from the Society; which I was unable to do

without reference, and I now fear that my reply will be very unsatisfactory, as all I can promise is, that I shall be most happy to meet the wishes of the Society as far as consistent with my duty to Government.

I beg you will convey to the Society my gratitude for the feeling conveyed in your letter, and with every assurance of respect,

I remain, Sir,
Your's faithfully,
(Signed) Rob. Gill.

Arcot,
December 18, 1844.

Laid before the Meeting two printed papers received from the Royal Geographical Society of London, containing queries respecting the Human Race.

Laid before the Meeting a copy of the Munich Society's Almanac received from Dr. Martius.

Read a letter from the Rev. G. Knox, dated 18th January, 1845, notifying his retirement from the Committee.

The Committee resolve to record their regret at the loss of Mr. Knox's co-operation and assistance.

(Signed) J. Minchin,
Secretary M. L. S., &c.

At a Meeting of the Managing Committee, on Tuesday evening the 4th March, 1845.

The Secretary laid before the Meeting three letters from Messrs. Wm. H. Allen and Co., dated 24th December, 1844, and 10th and 18th January, 1845, forwarding their account with the Society for the past year, and advising the despatch of Books and Magazines per the Steamer "*Plantagenet*," and the "*John Fleming*."

Read the following letter to C. P. Brown, Esq.

To

C. P. Brown, Esq.

Sir,

With reference to your letter of the 27th Ultimo, I am instructed by the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society to furnish you with the annexed extract from the Proceedings of the Annual General Meeting of the Society, held on the 1st Instant.

I have the honor, &c.
(Signed) J. Minchin,
Secretary M. L. S., &c.

Literary Society, College,
4th February, 1845.

Extract from the Proceedings of an Annual General Meeting of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, held at the Society's Rooms at the College, on Saturday, the 1*st February,* 1845.

Proposed by J. C. Morris, Esq. and seconded by Walter Elliot, Esq.

"That the warmest and best thanks of the Society be given to C. P. Brown, Esq. for his munificent present of Oriental Manuscripts, and that he be informed that immediate measures shall be taken to carry into effect his suggestion as to their preservation; and that pending a reference to Government, the Secretary be authorized to entertain the three persons recommended by Mr. Brown in the service of the Society." Carried unanimously.

A true Extract.

(Signed) J. MINCHIN,
Secretary M. L. S., &c.

At a Meeting of the Managing Committee, on Tuesday evening, the 1*st April,* 1845.

Read the following letter from Walter Elliot, Esq.

Guntoor, March 11, 1845.

MY DEAR MINCHIN,

I enclose a communication from Dr. Bird of Bombay, your brother Secretary of the Western Branch of the Parent Society, which I wish you would lay before the next Meeting of our Society. I dare say Felix will say a good word in favor of the Sister Institution of which he, I believe, as well as myself, is also a Member.

Your's sincerely,
(Signed) WALTER ELLIOT.

James Minchin, Esq.

BOMBAY ASIATIC SOCIETY'S ROOMS,
20*th February,* 1845.

MY DEAR SIR,

I regret to say that the low state of our Society's present income will oblige us to discontinue the publication of our Quarterly Journal, and can see no means of avoiding this but by obtaining a sufficient amount of subscription, among those interested in Oriental matters, in order to cover the expense. I have now in my possession much interesting matter quite enough nearly for two succeeding Numbers after the October one, and two Dissertations of Professor Lassen are on the way out to us; so that I think it would be a pity to abandon the publication of the work, without making an effort to continue it. I will therefore feel much obliged if you

will do me the favor of laying before the Madras Literary Society the accompanying *Prospectus* for subscriptions, which has been circulated here to the Members of our Society. The Bengal Journal which was made by Prinsep so successful a medium for encouraging and diffusing a taste for *Oriental Research* in all its *branches* now contains little beyond statistical papers and some subjects of *Natural History*, and the time seems now favourable for combining the efforts of all in India, interested in prosecuting *Oriental* inquiries. Few have more successfully devoted their leisure time to such inquiries than you yourself have done, and I am sure you have not yet exhausted the store of your knowledge, and are still capable of giving us valuable aid in this way.

I heard of our friend Shaw from Cannanore, and Mrs. S. wrote me to say he was much better.

Believe me, &c.

(Signed) James Bird.

N. B.—Is Major Felix at Madras or Simla?

(Signed) J. B.

Quarterly Journal of the Bombay Branch Royal Asiatic Society, edited by the Secretary.

The Committee of the Society, appointed at the Meeting of the 12th December last, to audit the accounts and for other financial objects having reported that the expenses of the Quarterly Journal can be no longer debited to the current income of the Society, but must be liquidated from special subscriptions to this individual object; the Secretary begs leave to intimate his willingness to carry on this publication under the auspices of the Society, provided nearly sufficient subscriptions, among the Resident, non-Resident Members of the Society and others, are obtained for defraying the expenses of publication. Situated so favorably as we are in Western India for investigating and illustrating peculiar and particular objects of research relative to *Hindu Mythology*, *Philology* and *History*, we are in possession of exclusive advantages for acquiring novel and useful information on the *Ethnography* of the various Asiatic races, and regarding the *Geography* and *Natural History* of the neighbouring countries, and on the *Paleography* and arts of their inhabitants, placed as we find ourselves between *Arabia*, *Persia* and *Tartary* on the one hand, and *Egypt*, *Ethiopia* and *Africa* on the other. With such advantages of locality it seems incumbent on us and the Society to diffuse and make known that information, on various subjects of Oriental research which many, the Editor has found, are willing to collect and communicate. No exertion of his shall be spared to make the Journal as extensively useful and interesting, on all subjects, as the advantages of the locality naturally promise; and he is sanguine, from the assistance hitherto given, that the

exertions of contributors will rather increase than diminish. The size of each number will be generally about a hundred octavo pages with Lithographs : for which it is proposed to charge Rupees 2-0-0 to Members of the Society, and Rupees 2-8-0 to *Subscribers* not Members. The following are the contents of the October number, now nearly ready for issue from the Press. 1st. Two ancient inscriptions in the Cave character and Sanscrit language translated into English. 2d. An account of the Temple of Somnauth, and translation of a Sanscrit inscription found there. 3d. The late Mr. Prinsep's correspondence relative to Indian antiquities. 4th. Hamaiyaric inscriptions from Aden and Saba translated into English. 5th. Geological observations on the alluvial soil of Sindh, and Hills in the neighbourhood of Hydrabad. 6th. Observations on the Runic stones of Scotland. 7th. Notice on Hindu Gold Coins found in the Southern Concan, and on the Gold Zodiac Coins of the Emperor Jehangir. 8th. On the origin of the Hamaiyaric and Ethiopic Alphabets. 9th. Analysis of a work entitled "Historical Researches on the Origin and Classes of the several Cave Temples of Western India." 10th. Literary and Scientific Notices. 11th. Proceedings of the Society.

At the January monthly meeting of the Society, the following Gentlemen subscribed their names to the continuation of the Journal, and such resident Members of the Society as are disposed to support it will favor me with their names and address.

BOMBAY,
B. R. A. S.'s Rooms,
17*th February*, 1845.

(Signed) JAMES BIRD,
Secretary.

James Burns, M. D., Bombay.
Captain H. B. Turner, Engrs., Bombay.
Lieutenant Stuart, do.
John Gordon, Esq., Bombay C. S.
Dr. George Buist, Bombay.
C. D. Pestonjee, Esq., do.
Dr. J. Boyd, Medical Service, Bombay.
M. Stovell, Esq., do.
James Bird, Esq., do.
Poona Library, Poona.
Sattara Library, Sattara.

Resolved,—That two copies of the above work be taken by this Society.

Read the following letter from Captain T. J. Newbold.

Kurnool, March 18, 1845.

MY DEAR MR. MINCHIN,

I have sent a cooly to-day with a box containing the Books kindly lent me by the Society, and beg to request that Buchanan's Travels in Mysore,

Canara, &c., Scott's Ferishta's History of the Deccan and Heyne's Tracts may be sent me and the last numbers of the Journal of the French Asiatic Society.

If this request be granted, please send the Books to Griffiths and Co.

Would you also send to Griffiths a set of the Madras Journal for M. Garcin de Tassy. I will pay for those you have sent up to me.

In the Box you will find a packet for Professor Owen; it contains bones from the caves of Kurnool. Also two for J. de Carle Sowerby, containing fossils from Trichinopoly. These please send on with the cooly to Messrs. Griffiths who will pack them on my own account and send them to London.

As soon as described by Professor Owen and Mr. Sowerby, I shall not fail to apprize the Society of the results. Messrs. Griffiths will pay the cooly his balance, but please write me a line in answer to say you have received the books, &c. There are 3 packets for you. One containing the Journals of the French Asiatic Society. Another, small specimens from the fossil bone caves, and the third, some minerals as per enclosed list—both of which please present to the Society from me.

No. 14, in the list is a mineral though not new to European Mineralogy, yet new to the Mineralogy of S. India. I discovered it in the lead mines in the Nulla Mulla hills a little to the east of Gazoopilly associated with galena, sulph. of barytes, chert and an olive green crystallized mineral hitherto not analyzed.

Of No. 14, Mr. Piddington who has analyzed it, thus writes, "I have the pleasure of informing you that your red mineral is as you suppose an ore of cerium, and moreover of that most rare kind carbonate of cerium. It contains iron, lead, lime, silex, alumina, and perhaps yttria and magnesia.

KURNOOL, *March* 18, 1845. } (Signed) T. J. NEWBOLD.

For the Asiatic Society of Madras.

No. 1. Packet contains French A. Society Journals.

No. 2. Fossilized bones from bone caves of Billa Soorgum, Kurnool frontier, with two specimens of the calcareous and gypsious bone breccia.

No. 3. Contains 14 Geological specimens as follow:

No. 1. Steatite quarried in the diamond limestone of Kurnool and exported in considerable quantities to Hydrabad, Madras, &c. It is used chiefly for pencils to write on the black prepared cloth books in which Natives keep accounts and for smoothing the surface of chunam pillars, &c. It passes into the substance called French chalk.

No. 2, 3, 4, and 5, varieties of Steatite.

No. 6. Crystallized sulphate of barytes from diamond limestone of Kur-

nool. It is called Mugharai by the Natives and used by the Brahmins coarsely powdered in delineating the figures before the doors of their houses. It is preferred for this purpose to chalk as the powder has a peculiarly glittering appearance when the rays of the sun fall upon it.

No. 7. Specimen showing diamond sandstone and the chocolate colored shales of the limestone at the time of junction when nests of micaceous iron ore are observable.

No. 8. Diamond limestone exhibiting cubic iron pyrites in process of dissintegration which dropping or being finally washed out leaves circular cavities on its surface.

No. 9. Diamond limestone with scorings on its surface.

No. 10. Do. with furrows.

No. 11. Do. with marks resembling those said to be caused by ancient rains on the surface of the new red sandstone of England.

No. 12. Altered Diamond sandstone near contact with trap dyke, exhibiting an actynolitic development in its structure.

No. 13. Specimen from line of contact of diamond limestone, exhibiting actynolite passing into asbestus and mingled with calc spar.

No. 14. Carbonate of Cerium, a mineral new to S. India, discovered by me in the Eastern Ghauts near Gazoopilly, Kurnool, associated with galena, chert, sulph. of barytes, an olive green crystallized mineral not yet analyzed, yttria and probably magnesia.

(Signed) T. J. NEWBOLD.

Resolved,—That the Books requested by Captain Newbold be forwarded to him, and the thanks of the Society be rendered to him for his valuable present of Fossil bones and minerals.

(Signed) J. MINCHIN,
Secretary M. L. S., &c.

At a Meeting of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, held on Tuesday evening, the 6th May, 1845.

PRESENT.

Chairman.
J. C. MORRIS, Esq.

Members.
J. U. ELLIS, Esq. LORD ARTHUR HAY,
LIEUT. COLONEL FELIX, CAPTAIN LOSH, and
J. MINCHIN, Esq., *Secretary.*

Read the following letter to the Chief Secretary to Government.

To

The Chief Secretary to Government.

Sir,

I have the honor by desire of the Committee of Management of the Madras Literary Society and Auxiliary of the Royal Asiatic Society to request that you will submit to the Most Noble the Governor in Council the accompanying copy of a letter addressed to me by Mr. C. P. Brown, who kindly undertook to arrange and make a Catalogue of the Oriental Books recently forwarded to the Society by the Honorable the Court of Directors.

It will be observed that in addition to this important service Mr. Brown has made to the Society the munificent gift of his extensive Library of Native works principally in the Sanscrit and Telugoo languages.

The works in the Native languages now in the keeping of the Madras Literary Society, comprising the Mackenzie Manuscripts, those received from the Library at the India House during last year, and those now presented by Mr. Brown, form the largest and most valuable collection ever made, and it appears to the Society to be an object of national importance that they should be kept up and carefully preserved.

It appears from Mr. Brown's letter that to do this effectually the services of three persons, on salaries amounting to 51 Rupees per mensem, will be absolutely requisite, and as the Literary Society have no funds which are appropriable to such a purpose, they are induced to apply to his Lordship in Council for the requisite assistance to effect this very desirable object.

The Committee desire me to add that should Government be pleased to comply with their request, they will consider it their duty to see that the works are properly attended to, and they will be happy to give access to the Library to respectable persons, under any rules or regulations which the Government may be pleased to prescribe.

In conclusion the Committee would beg to recommend that the payment of the individuals for whose entertainment they now apply, should be entrusted to the Secretary to the College on the production of a certificate from the Secretary to the Literary Society, that the parties have carefully attended to their duty.

Literary Society, College,
8*th April*, 1845.

(Signed) J. Minchin,
Secretary M. L. S., &c.

Read the following letters to W. Elliot, Esq., James Bird, Esq. and Captain T. J. Newbold.

To

WALTER ELLIOT, Esq.

Guntoor.

SIR,

In acknowledging the receipt of your communication of the 11th ult. and the enclosures, I have to acquaint you that the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society have resolved to subscribe for two copies of the Journal of the Bombay Branch of the Royal Asiatic Society, and I have accordingly written to Mr. James Bird to transmit to the Society as soon as published, two copies of each No.

MADRAS LITERARY SOCIETY,
COLLEGE,
15*th April*, 1845.

I have the honor to be, &c.
(Signed) J. MINCHIN,
Secretary M. L. S., &c.

To

JAMES BIRD, Esq.

Secretary Bombay Branch Royal Asiatic Society.

SIR,

With reference to your letter to Walter Elliot, Esq., dated 20th February last, I am instructed by the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, to request you will be pleased to put down the name of our Society for two copies of the Journal of the Bombay Branch of the Royal Asiatic Society, and to transmit the same by Banghy as they issue from the Press.

MADRAS LITERARY SOCIETY,
COLLEGE,
15*th April*, 1845.

I have the honor to be, &c.
(Signed) J. MINCHIN,
Secretary M. L. S., &c.

To

Captain T. J. NEWBOLD,

Kurnool.

SIR,

In acknowledging the receipt of your letter of the 18th Ultimo, I am instructed by the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, to convey to you their best thanks for the mineral and fossil specimens which you have done them the honor to present to the Society.

I avail myself of this opportunity to inform you that the Books, &c. forwarded by you by cooly have been received, and the parcels addressed to Professor Owen and Mr. Sowerby have been, in compliance with your request, sent to Messrs. Griffiths and Co., to whom I have also sent for

transmission to you, the undermentioned Books from the Society's Library as requested in your letter under acknowledgment.

I have the honor to be, &c.

LITERARY SOCIETY, COLLEGE, 15*th April*, 1845. (Signed) J. MINCHIN, *Secretary M. L. S., &c.*

Buchanan's Journal through Mysore, Canara, &c. 3 vols.
Heyne's Tracts on India.
Journal Asiatique from July to December, 1844, 5 Nos.
Madras Journal of Literature and Science, 24 Nos.

Read the following communication from the Chief Secretary to Government.

Public Department.

No. 383.

Extract from the Minutes of Consultation, dated 28*th April*, 1845.

Read the following letter from the Secretary to the Committee of Management of the Madras Literary Society and Auxiliary of the Royal Asiatic Society.

Here enter 9th April, 1845.

Resolved,—That the Government of India be moved to sanction the expenditure contemplated in the foregoing letter, and that the Secretary to the Committee of Management of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, be requested to furnish the Government with a Catalogue Raisonnée of the Books and Manuscripts, similar in its character to Professor Wilson's Catalogue of the Mackenzie M. S. S. They will also be pleased to report to Government the estimated value of this collection.

(A true Extract.)

(Signed) J. F. THOMAS,
Chief Secretary.

To

The Committee of Management of the Madras Literary Society and Auxiliary of the Royal Asiatic Society.

Resolved,—That a copy of the foregoing communication be forwarded to C. P. Brown, Esq., and that he be requested to furnish the Society with a copy of the Catalogue of the Manuscripts prepared by him, and to state his opinion as to their estimated value, in order that the same may be transmitted to Government, the Committee being unable to make a Catalogue Raisonnée of the Manuscripts.

Resolved,—That the late Mr. A. K. Bantleman's Report on the Society's Manuscripts be circulated to the Committee.

(Signed) J. MINCHIN,
Secretary M. L. S., &c.

At a Meeting of the Managing Committee, on Saturday evening, the 5th July, 1845.

Read the following letter from Captain T. J. Newbold.

MY DEAR MINCHIN,

You will be surprised to find me so near, a broken blood vessel in the lungs, or rather its consequences induced my Medical attendant at Kurnool to hurry me down to the sea side in anticipation of regular sick leave. I am confined to my room for the present; but ere long hope to do myself the pleasure of calling on you.

Please present the two papers herewith sent to the Madras Literary Society. Can you tell me who has charge of the publication of the Madras Journal in Best's absence. I sent a paper on Geology, which I should very much wish to get back if possible.

When is the next number to come forth and what are the Articles it is to be composed of?

CLUB,
8th May, 1845.

Your's very sincerely,
(Signed) T. J. NEWBOLD.

Read the following letter to C. P. Brown, Esq.

To

C. P. BROWN, Esq.

SIR,

In forwarding to you the annexed copy of a communication received from Government I am instructed by the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, to request you will be pleased to furnish the Society as early as practicable with the List of the Manuscripts prepared by you in Telugu, and to state also their estimated value for the information of Government.

I have, &c.
(Signed) J. MINCHIN,
Secretary M. L. S. &c.

LITERARY SOCIETY, COLLEGE,
16th May, 1845.

Read the following letter from James Bird, Esq.

To

J. MINCHIN, Esq.
Secretary Madras Literary Society.

SIR,

I was favored with your letter of the 15th of April last, intimating that the Managing Committee of the Madras Literary Society had subscribed for two copies of the Journal, Bombay Branch Royal Asiatic Society, to be transmitted on publication per Bangy dawk. I have now the plea-

sure of forwarding by this day's dawk two numbers of the Journal last published; for which a memorandum of the cost is also enclosed.

I further beg leave to acquaint you that the January number of the Journal is now nearly ready for issue, and will be transmitted as soon as published.

May I further request you will do me the favor of endeavouring to extend our Subscription List at Madras, as I much fear I shall be obliged to discontinue the publication, if no additional Subscribers be obtainable, in Madras and Bengal: and this I will much regret, as a Journal on this side of India has much in its power to collect information, and extend the field of Oriental Research.

I remain, &c.

BOMBAY BRANCH, R. A. SOCIETY, 13*th June*, 1845. (Signed) JAMES BIRD, *Secretary.*

Read two letters from Messrs. W. H. Allen and Co., dated 19th April and 19th May last, advising the despatch of books and periodicals per Steamer.

Mr. Minchin having intimated that the situation of Secretary will become vacant on the 10th instant, by his departure for England,

The Committee desire to express their regret that the Society is about to be deprived of the valuable services of that Gentleman, and to tender to him their best thanks for the interest he has taken in the welfare of the Society, and for the able and efficient manner in which he has performed the duties of Secretary during the last seven years.

(Signed) J. C. MORRIS, *For the Secretary.*

At a Meeting of the Managing Committee, on Friday evening, the 8th August, 1845.

Read the following letter from C. J. Bird, Esq.

17*th July*, 1845.

MY DEAR MORRIS,

I send you the Stone* and hope the fellow likes carrying it—20 lbs. 14 oz.: I was so pressed for time at the time I got the stone that I sent the rough notes concerning it along with the stone to Madras—Walter Elliot had them. The Astronomer also saw the stone—and I understand a no-

* The Meteoric Stone of which a notice will be found in the Journal, Volume xiii. Part ii, Page 164.

tice on the subject has been compiled to appear in the next No. if ever there is one, of the Madras Journal of Literature and Science.

Believe me, &c.
(Signed) C. J. BIRD.

P. S.—I send a paper of sadly broken "Edible Birds' Nests" from the Straits, I fear they are not worth a place in the Museum; let any body make soup of them that likes.

Read the following letter from the Honorable H. Dickinson, Esq.

To

The Secretary of the Literary Society,
Madras.

SIR,

I have the honor to acknowledge the receipt of your letter of the 14th Instant, and have to beg that you will assure the Honorable the President, the Honorable the Vice Presidents, and the Members of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society that I accept with great satisfaction the honor to which they have invited me of becoming one of the Vice Presidents of the Society.

ADYAR, 21*st July*, 1845.

I have, &c.
(Signed) H. DICKINSON.

Read the following letter from the Chief Secretary to Government.

No. 696.

Public Department.

GENTLEMEN,

With reference to the Extract from the Minutes of Consultation of the 28th April last, No. 383, I am directed by the Most Noble the Governor in Council to request you will cause the Catalogue and information there called for, in respect to the Books and Manuscripts presented by Mr. C. P. Brown, to be furnished to this Office at an early date.

I have, &c.
(Signed) J. F. THOMAS,
Chief Secretary.

FORT ST. GEORGE, 7*th August*, 1845.

To

The Committee of Management of the Madras Literary Society,
and Auxiliary of the Royal Asiatic Society.

Read two letters from Messrs. W. H. Allen and Co., dated 14th and 19th June, 1845, intimating the despatch of Books and Periodicals.

(Signed) T. C. JERDON,
Secretary M. L. S., &c.

At a Meeting of the Managing Committee, on Tuesday evening, the 9th September, 1845.

Read the following letter from the Chief Secretary to Government.

Public Department.

No. 737.

Extract from the Minutes of Consultation, dated 15th August, 1845.

Read the following letter from the Secretary to the Government of India.

No. 490.

From

G. A. BUSHBY, Esq.

Secretary to the Government of India.

To

J. F. THOMAS, Esq.

Chief Secretary to Government,
Fort St. George,

Dated the 19*th July*, 1845.
Home Department.

SIR,

I am directed to acknowledge the receipt of your letter No. 8, dated the 28th April last, with enclosures, and in reply to state for the information of the Most Noble the Governor in Council that the Governor General in Council being willing to afford reasonable encouragement to Scientific Societies towards the preservation of valuable collections of Oriental Literature, is pleased to sanction the employment of the Establishment noted in the margin* at a cost of Rupees 51 per mensem for the Madras Literary Society and Auxiliary of the Royal Asiatic Society.

			Rs.
* 1	Native	Librarian..	25
1	do.	do. ..	14
1	do.	do. ..	12
		Rups.	51

I have, &c.
(Signed) G. A. BUSHBY,
Secy. to the Govt. of India.

FORT WILLIAM,
The 19*th July*, 1845.

Ordered to be communicated to the Committee of Management of the Madras Literary Society and Auxiliary of the Royal Asiatic Society with reference to their Secretary's letter of the 8th April last, and to the Offices of Account and Audit.

(True extract and copy.)
(Signed) J. F. THOMAS,
Chief Secretary.

To

The Committee of Management of the Madras Literary Society, and Auxiliary of the Royal Asiatic Society.

Read the following letter.

To

The Chief Secretary to Government,
Fort St. George.

Sir,

I have the honor to acknowledge the receipt of your letter of the 7th Instant, and in reply beg to state that I have communicated with Mr. C. P. Brown on the subject of your letter, and that Gentleman will as early as possible give the information therein required.

I have, &c.

Literary Society, College, 16*th August*, 1845. (Signed) T. C. Jerdon, *Secretary M. L. S., &c.*

Read the following communication.

To

C. P. Brown, Esq.

Sir,

The Madras Government having again addressed the Society on the subject of the Mackenzie Manuscripts, I am instructed by the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society to direct your attention to the communication forwarded to you by my predecessor James Minchin, Esq. on the 16th May last ; and to request you will be pleased to inform them how far it may be in your power to enable them to supply the information required by Government.

I beg to forward a copy of the letter received from Government on the subject.

I have, &c.

Literary Society, College; 16*th August*, 1845. (Signed) T. C. Jerdon, *Secretary M. L. S., &c.*

Read the following communication from C. P. Brown, Esq.

To

The Secretary to the Literary Society.

Sir,

I have to acknowledge your letter of the 7th Instant. Illness has delayed my reply.

I am herein asked to furnish a Catalogue Raisonnée of my Library, presented to Government. To do this would occupy more than one year and would demand a Native establishment for the express purpose.

The question as to the sum this Library cost me is not easily answered. Including transcribers, paper, binding, money paid to examining Pundits, and other items I have usually rated it about 30,000 Rupees. It is not

right however to put the valuation to me—the question ought in propriety to be considered by others.

I have, &c.

21*st August*, 1845. (Signed) C. P. Brown.

A paper on the " Antiquities of the Neilgherry Hills" communicated by Captain Congreve, was laid before the Meeting which the Committee has resolved to publish in the Society's Journal.

(Signed) T. C. Jerdon,
Secretary M. L. S., &c.

At a Meeting of the Managing Committee, on Tuesday evening, the 7th October, 1845.

Read a letter from Messrs. W. H. Allen and Co., dated 19th August, 1845, advising the despatch of Books and Periodicals per Steamer.

Read the following letter from Captain S. C. Macpherson.

Madras, 22*d August*, 1845.

My Dear Sir,

I beg leave to offer for the acceptance of the Madras Branch of the Royal Asiatic Society a pair of horns of the Cervus Frontalis of Munnipore, in Assam, discovered by Captain Guthrie, Bengal Engineers.

Very truly your's,
(Signed) S. C. Macpherson.

To
T. C. Jerdon, Esq.
Secretary M. Asiatic Society.

Ordered that these be deposited in the Society's Museum, and that the thanks of the Society be communicated to the Donor.

(Signed) T. C. Jerdon,
Secretary M. L. S., &c.

At a Meeting of the Managing Committee, on Wednesday evening, the 5th November, 1845.

Read the following letter to the Chief Secretary to Government.

To
J. F. Thomas, Esq.
Chief Secretary to Government.

Sir,

The Government of India were pleased under date the 19th July last to sanction an establishment amounting to 51 Rupees per mensem for the custody of the extensive Library of Oriental Works under the care of the

Madras Literary Society and Auxiliary of the Royal Asiatic Society of which due notice was given to the Society in the Minutes of Consultation of Government, under date the 15th August, and a bill was accordingly presented to the Civil Auditor for the pay of the said establishment from the date on which it was entertained.

It will be observed however from the accompanying copy of an official memorandum of that Officer that he does not consider himself authorized to pass the bill for the period anterior to the date of the said Minutes of Consultation, without the special sanction of Government.

It has already been explained in my predecessor's letter of the 8th April last, that the Literary Society is not in possession of any funds from which the charges of the establishment in question can be defrayed, and as the Supreme Government have recognized the importance of the object contemplated by sanctioning the establishment, the Committee of management beg me to express their hope that Government will be pleased to authorize the payment of the sum granted, from the date on which the establishment was entertained, viz. 1st February, 1845.

I have, &c.

LITERARY SOCIETY, COLLEGE; 3d *November*, 1845. (Signed) T. C. JERDON, *Secretary M. L. S., &c.*

OFFICIAL MEMORANDUM.

The Civil Auditor regrets that he cannot pass the accompanying bills* as forwarded to him. The regulations of Government are that when new establishments are sanctioned their pay should be drawn from the date of their entertainment, subsequent to the orders of Government. It appearing that the establishment now sanctioned for the Literary Society was entertained previously to the receipt of the Minutes of Consultation of Government, the Civil Auditor has passed* the Bill from the date of those Minutes but he cannot pass the charge for the previous period without the special sanction of Government.

* 1. From 1st February to 31st August, 1845.—Rupees 357 0 0.
1. From 19th July to 31st August, 1845.—Rupees 72 6 2.

* For Rupees 27-15-5 from 15th to 31st August, 1845.

FORT SAINT GEORGE, CIVIL AUDITOR'S OFFICE, 8*th September*, 1845. (Signed) J. C. MORRIS, *Civil Auditor.*

To

The Secretary Madras Literary Society and Auxiliary of the Royal Asiatic Society.

Resolved,—That a letter be circulated regarding the frequent practice of late of making pencil remarks in the books of the Society.

(Signed) T. C. JERDON,
Secretary M. L. S., &c.

At a Special General Meeting of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, held at the Society's Rooms, at the College, on Monday, the 24th November, 1845.

The Honorable Sir E. Gambier, President, in the Chair.

The Meeting proceeded to elect the following Gentlemen as Members of the Managing Committee in the room of T. V. Stonhouse, Esq. who has resigned, and Captain S. Best and Lord Arthur Hay who have left the Presidency.

Rev. G. Knox proposed by J. C. Morris, Esq., seconded by Walter Elliot Esq., and carried unanimously.

Lieutenant Colonel Pratt, C. B. proposed by Lieutenant Colonel Felix, seconded by Walter Elliot, Esq., and carried unanimously.

T. Pycroft, Esq. proposed by J. C. Morris, Esq., seconded by Lieutenant Colonel Watkins, and carried unanimously.

Proposed by J. C. Morris, Esq., and seconded by Walter Elliot, Esq. that Captain S. Best be considered as an Honorary Member of the Managing Committee; carried unanimously.

It was resolved by the Meeting that the appointment of T. C. Jerdon, Esq. as Secretary by the Honorable the President at the recommendation of the Managing Committee, be confirmed.

Mr. Walter Elliot lays on the Table a set of Earthen Vessels dug out of an old sepulchre in the American Mission Compound at Madura, and forwarded to him by the Rev. William Tracy of that Mission.

A large fragment of Meteoric stone presented by C. J. Bird, Esq., which fell at Rajahmundry in 1844, is also laid on the Table. See Society's Journal No. 31.

The thanks of the Meeting were unanimously voted to the Honorable the President for his conduct in the Chair.

(Signed) E. J. GAMBIER,
President.

(Signed) T. C. JERDON,
Secretary.

At a Meeting of the Managing Committee, on Tuesday evening the 9th December, 1845.

Read the following communication from the Chief Secretary to Government.

No. 1057.

Public Department.

Extract from the Minutes of Consultation, dated 15*th November*, 1845.

Read the following letter from the Secretary to the Committee of Management of the Madras Literary Society and Auxiliary of the Royal Asiatic Society.

Here enter 3d November, 1845.

The Most Noble the Governor in Council authorizes the Civil Auditor to pass the Bill of the Secretary to the Madras Literary Society for the Establishment referred to in the foregoing letter from the date of its entertainment, viz. the 1st February last.

(A true Extract.)

(Signed) J. F. THOMAS,
Chief Secretary.

To

The Committee of Management of the Madras Literary Society and Auxiliary of the Royal Asiatic Society.

Read the following letter from T. Pycroft, Esq.

To

T. C. JERDON, ESQ.

SIR,

I do myself the honor to acknowledge the receipt of your letter of this day's date, and beg in reply to state that it will afford me much pleasure to become a Member of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society.

MADRAS, 26*th November*, 1845.

I have, &c.
(Signed) T. PYCROFT.

Read the following letter from Captain J. T. Smith, Engineers, reporting the arrival of a box of minerals for the Museum of the Society from Major General Cullen.

To

T. C. JERDON, Esq.

DEAR SIR,

I have received a large chest of Minerals from General Cullen, part of which he requests I will send to the Museum of the Literary Society; I believe they are all, or chiefly, specimens of a peculiar species of limestone, which General Cullen considered likely to be valuable as a water cement, and he requests me to make some experiments with it. I have not been able to do more than make a single trial, of which I will report the result to him. As the box is a heavy one, I shall be much obliged if you will kindly inform me where to send it and to whose care it ought to be consigned.

MINT,
4*th December*, 1845.

Your's truly,
(Signed) J. T. SMITH.

Resolved,—That the thanks of the Society be communicated to Major General Cullen for the box of Minerals presented by him for the Museum of the Society.*

Read a letter from Messrs. William H. Allen and Co., advising the despatch per Steamer of the Magazines for October and several Books.

Resolved,—That Roxburgh's Flora Indica be purchased from C. P. Brown, Esq. for 36 Rupees, and that Owen's Odontography, first part, be purchased for 10 Rupees.

Resolved,—That the works of Balzac, Victor Hugo, and Paul de Kock, for sale at Messrs. Miller and Son's, be bid for at the sales by the Secretary.

(Signed) T. C. JERDON,
Secretary M. L. S., &c.

* These minerals are from the same locality as those described in the Journal of the Asiatic Society of Bengal, Volume xiv. Proceedings, page cxvi.

C. K. S. PRESS—MADRAS.

BRITISH MUSEUM

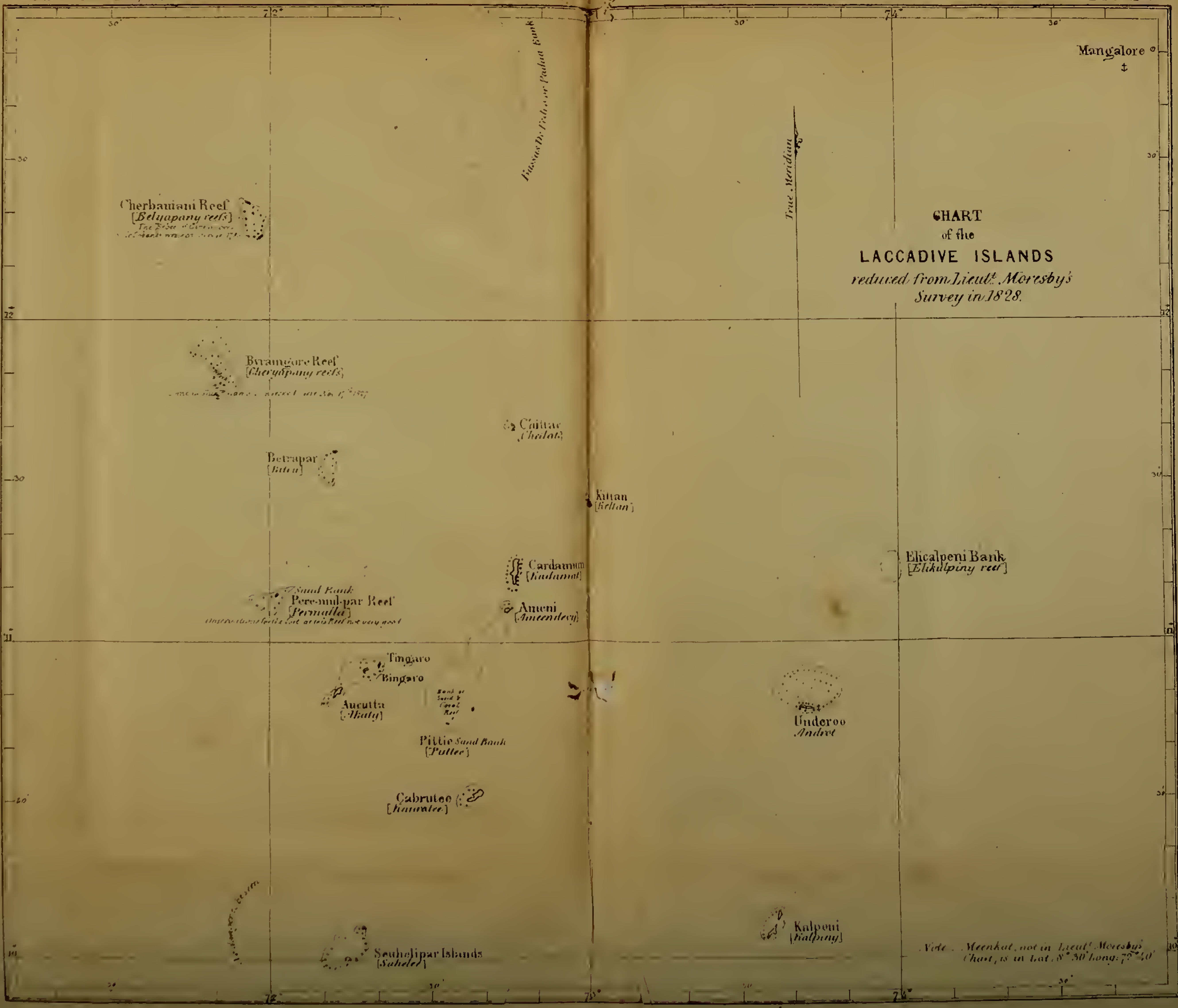


CHART
of the
LACCADIVE ISLANDS
reduced from Lieut. Moresby's
Survey in 1828.
Mangalore
True Meridian
Cherbaniani Reef
[Belyapany reefs]
Byramgore Reef
[Cherydpany reefs]
Chittac
[Chetlat]
Betrapar
[Bitra]
Kiltan
[Keltan]
Cardamum
[Kadamat]
Elicalpeni Bank
[Elikalpiny reef]
Sand Bank
Pere-mul-par Reef
[Permalla]
Ameni
[Ameendevy]
Tingaro
Bingaro
Aucutta
[Akaty]
Pittie Sand Bank
[Puttee]
Underoo
Andret
Cabrutee
[Kavratee]
Kalpeni
[Kalpiny]
Seuhelipar Islands
[Saheler]
Note. Meenkat, not in Lieut. Moresby's Chart, is in Lat. 8° 30' Long. 73° 40'

MADRAS JOURNAL

OF

LITERATURE AND SCIENCE.

No. 33. *July—December*, 1847.

I. *Description of the Laccadive Islands. By* W. ROBINSON, ESQ., *of the Civil Service.*

[THE following interesting account of these little known Islands has been transmitted to us for publication by order of Government. In order to render the paper as complete as possible, we have prefixed an abstract of such notices of their early history as have been discovered in the few works of reference accessible.

The Laccadive Islands or according to Lieutenant Wood as the name is pronounced by the islanders, " Lakera deevh" [*Lak'h* or *Laksha dwipa quasi* " Myriad Isles"] from the most northerly group of that extensive chain in the Indian ocean extending from about 10° N. Lat. to 8° S. Lat.

By the ancients they were little known. Ptolemy* mentions them under the name of Dimurce Insulæ [the detached isle of Minicoy, being probably that distinguished by the appellation of Zibula,] to the Southward of which, he adds, lay a multitude of islands reckoned at 1,378 in number,—evidently referring to the Maldives. The author of the Periplus of the Erythræan Sea in enumerating the exports from the port of Baraké or Nelcynda† (Νελκυνδα) specifies a particular kind of tortoise-

* Lib. vii. 4.

† Vincent. Perip. p. 459. Nelcynda or more properly Nelcoonda, described as a town of consequence on the river Baris, has generally been identified with Neleseram but appears to correspond better with Neelcoond on the Tadry river, the mouth of which not only forms the best harbour on that part of the coast, but is to this day the main outlet to the trade of the interior through the parts of Coompta and Mirjan. The Neelcoond *ghat* or pass also leads to Banawassi, formerly a city known to Ptolemy, and now superseded by Sircy.

shell as obtained from the islands lying off the coast of Limyrice or Canara. But in early times they seem to have been more generally confounded with the Maldives, the whole being known under the collective title of *Divi* or " the Islands." It is thus that Ammianus Marcellinus in the 4th century alludes to them in his eulogium on the memory of the Emperor Julian: " Inde nationibus Indicis certatim cum donis optimates mittentibus ante tempus abusque *Divis* et Serendivis." *

The Persians and Arabs employed a similar collective designation in speaking of them, viz. *Dibajat* [دیبجات] which is merely the Hindu word with the Persian form of the plural.† The Arabian work Silsilah ut Tawarikh, translated in part by M. Reinaud, enumerating the seven seas traversed by the merchants trading to China in the 9th century, reckons the number of the islands at 1,900, and describes them as lying between the seas of Herkend and al-Larevi [Larike of Ptolemy the modern Guzerat] as producing amber (ambergris) and cocoanuts, with a currency of cowrees, and governed by a woman. No distinct mention of the Laccadives occurs in Ibn Batuta, who visited Malabar in the early part of the 14th century and resided for some time in the Maldive Islands. He found the greater part of the southern coast both of Malabar and Coromandel in the possession of Mohammedan or Arab rulers, and makes particular mention of the chief of Honore [هنور] named Jemal-ud-Din whom he accompanied in a hostile expedition against the island of Sindàboor. [جزيرة سندابور] The force was conveyed in 52 vessels and the island was occupied not without resistance. It is difficult to identify the place here indicated. None of the Laccadives appear likely to have been of sufficient importance to draw down such an invasion, and yet it cannot refer either to the Maldives or Ceylon, both of which were subsequently visited by the traveller and described in great detail. From Sindaboor he returned after some months to the mainland to look after some property left at Coulam (كولم or Quilon), and thence proceeding northward through Calicut, he once more repaired to Honore and again by sea to Sindaboor, but finding his patron Jemal-ud-Din besieged there by an infidel king, he sailed for the Maldives [ذيبة المهلي] where he arrived after a voyage of ten days.

His description of these is very minute and agrees with that of the Silsilah ut Tawarikh above quoted. He reckons them at about 2,000 in number, alludes to their disposition in *atolls* or circular reefs, to the production of the cocoanut, the circulation of cowries for money, and the domination of a female Sovereign. From this period we have no further mention of the Laccadives until their discovery by De Gama in 1499.

* Lib. 22. c. 7.

† Reinaud, Rel. des. Voy. I. lv.

At this time they seem to have belonged to the Ali Rajahs or Mohammedan chiefs of Cannanore, who are said to have assumed this title signifying in Malayalum "Prince of the Sea" from the possession of these Islands. The author of the Tohfat al Mujahidin in describing the contests between the Portuguese and the Native chiefs of Malabar, makes the following mention of a plundering expedition undertaken by the Franks against the Laccadives on the occasion of a war between them and the Ali Rajah about the year 1558, a transaction bearing some resemblance to the invasion of Jemal-ud-Din related by Ibn Batuta. "During this warfare against the infidel Franks, Alee-Azraja, a Mohammedan leader of great consideration (upon whom may God shower down His best blessings!) greatly distinguished himself, having exerted himself with superior zeal and bravery, and lavished his wealth without sparing, in the cause; although he was not seconded in these his efforts by the Ray of Koltree, or by the great body of the population of his dominions. In consequence of the zeal shown by him, however, these cursed Franks (whom may God abandon to destruction!) set sail in a fleet of galliots to attack the Islands of Malabar, which belonged to Azraja, and which acknowledged his authority; and arriving amongst them, they made a descent upon the Island of Ameni, slew a vast number of its inhabitants, and made captives of more than four hundred souls, men and women. They plundered also every thing of value that it contained, and burnt the greater part of the mosques and houses that were upon this Island. And before their descent upon Ameni they had visited Shatelakum, where they had put to death the chief part of its inhabitants, and taken many prisoners. Now the natives of these Islands are the whole of them an inoffensive race, being possessed neither of arms, nor any means of defence whatever. Notwithstanding this, a large portion of them suffered death, being victims to the barbarity of the Franks. And amongst these was a man of great virtue and piety, one who was far gone in years, and also a woman, who was his equal in goodness and piety; for although these were possessed of no means of self-defence, yet the Franks seized them, and put them to death in the most cruel manner, casting earth and stones upon them, and striking them with blows that caused ghastly wounds, persevering until death released their victims from their barbarity. May God, whose mercy is unbounded, have compassion on their souls! To return, however, these Islands are many in number; but the principal ones, and those which contain cities, are only five; and these are Ameni, and Kordeeb, and Anderoo, and Kaluftee, and Mulkee; and of the smaller ones, the most inhabited are Aceanee, Kunjamunjula, and Shatelakum."*

This account bears evident signs of exaggeration, but the atrocities

* p. 150.

which disgraced the early operations of the Portuguese and the plundering expeditions of Sodre, Barreto, Sanpayo and others, leave too much reason to believe that the relation of the Arabian historian is not without foundation.

Notwithstanding the maratime superiority of the Ali Rajas which led them even on several occasions to attempt the conquests of the Maldives they were unable to retain undisputed possession of the Laccadives. The most northerly Islands of the group seem to have been for a considerable period under the dominion of the Hindu Princes of Bednore or Nuggar, whose dominions comprehended the northern portion of Mysore and the whole of the modern province of Canara. "Four of the Islands," observes Mr. Ravenshaw in an official communication to the Government of Fort St. George, "with their subordinate islets were formerly comprehended in the territories of the Bedur Ranis of Bednore, and continued so until the war between that State and the Ali Rajah of Cannanore, during which they were captured and retained till $\frac{962}{1786\text{-}7}$ when the inhabitants of Ameendivi under a pretence of oppression and ill treatment from the Bibi's people came to Mangalore and entreated Mahommed Sahib, the Amildar under Tippoo, to get them transferred to his management. He accordingly wrote to Seringapatam on the subject, and the business was adjusted with the Bibi's vakeels there, Tippoo ceding 5 *tarahs* of the Cherical district assessed at 1,500* Pagodas per annum in lieu of them. This was deemed a fair equivalent according to the then value of the islands which were rated to yield 200 candies of *coir* to the Circar at a government price of 7½ Pagodas per candy, which were sold again on account of the state at 15 Pagodas, and 1,500 were thus netted to the public Treasury." When the Mysore troops were driven out of Malabar, the Rajah of Cherical repossessed himself of the districts wrested from him by Tippoo. On the restoration of peace the Bibi claimed the interference of the Joint Bengal and Bombay Commissioners appointed in 1793 to adjust the cessions of territory exacted by the first treaty of Seringapatam. By them it was decided that the grants made by Tippoo out of the Cherical District, having been conferred "whilst the Rajah had no power to resist or object, it was very natural for him to resume, on recovering his country, those temporary alienations from it, especially when made in favor of a party whom he had ever looked on as highly inimical to his family, in explanation of which, it hath already been noticed that the Bibi's uncle and predecessor held all Cherical under Hyder from 1766-7 to 1776-7, when he was dispossessed by Hyder in favor of the then Rajah, Ravi Varma, who was again driven out by the Bibi's husband in 1783; besides which a long series of other mutual ill offices appears to have existed between these rival families, so

* Mr. Warden states that her *sunnud* which he had seen specified the 5 Tarahs to be worth 7,380 Rupees or 1,845 Pagodas annually.

that neither could expect any favor or forbearance from the other, and as we thought the Rajah was entitled to use his discretion in regard to the two resumptions in question, we tolerated them."

The Islands though not formally ceded by the first treaty of Seringapatam were not restored to the Bibi, and her claim was finally extinguished when the whole of the Sultan's remaining possessions passed into the hands of his conquerors, by the right of the sword, in 1799.

The Bibi having thus in consequence of her close alliance with the Sultan, lost both the Islands and the districts conferred in lieu of them, threw herself on the liberality of the British Government. Her claim for the restoration of the former was rejected by the Madras Government in 1804, but met with more lenient consideration from the Court of Directors, who in 1806 declared " that though from the former aversion of the inhabitants to the Government of the Bibi it would not be advisable to restore the Islands themselves, some consideration in money should be allowed on account of them." Owing to various causes the final adjustment of this indemnity was deferred from time to time and was only finally settled at a remission of 1,500 Pagodas in the amount of the tribute paid by her for her possessions on the mainland by the orders of Government, dated 23d March, 1823.

Since that time the Islands have remained in the condition in which we find them described by Mr. Robinson.]

The following description of the islands of the Laccadive group attached to the district of Canara is the result of observations made during two expeditions thither in 1844 and 1845. Though unable to visit the islands under the Beeby of Cannanore, I made such inquiries into their condition as appeared necessary to enable me to compare the two divisions of this group.

The Laccadive group occupies a space extending from 8° 30′ to 12° North Latitude and from 71° to 73°, 40 degrees East Longitude. It consists of 8 or 10 more or less inhabited and cultivated, and one or two uninhabited islands, besides a few isolated rocks. Beyond the group to the north-west stretch the extensive reefs of Cheryapany and Belyapany. The group runs nearly parallel to the line of the Coast at a distance of 170 to 200

	Names of the Islands.
Attached to the district of Canara.	Chetlat.
	Keltan.
	Betra, (uninhabited island.)
	Kadamat.
	Ameendevy.
	Bellyapany, } open reefs.
	Cheryapany, } open reefs.
	Permalla, } open reefs.
Attached to the territory of the Beeby of Cannanore.	Akaty.
	Kouraty.
	Androt.
	Kalpiny.
	Suheli, (uninhabited.)
	Meenkat.

miles, and is nearly equally divided between the Beeby of Cannanore and the district of Canara.*

Unlike coral formations of this description the islands and reefs on which they stand lie 15 or 20 miles distant from each other and are all separated by channels of great breadth and perfectly free from shoals and rocks. With one exception they are out of sight of each other.

* The following is Lieutenant Wood's Tabular list of the Islands. Jour. R. Geog. Soc. vol. vi. p. 30.

LAKERADEEVH ARCHIPELAGO.

	Islands.		Population.				Articles of Commerce	
	1	2	3	4	5	6	7	8
No.	Names.	To whom belonging.	Inhabitants.	Origin.	Religion.	Sect.	Exports.	Imports.
1	Ānderot	Bebee or Ranee of Cannanore.	1,800	Malabar Coast.	Mahomedan.	Mapply.	Cocoanuts, coir, a few couries, and a kind of coarse sugar or jaggery, made from the cocoanut-tree.	Rice and coarse cotton cloths.
2	Cábârettœ		1,200					
3	Ākhâtœ		1,300					
4	Kâlpânœ		800					
5	Āhmânœ	Ostensibly British.	800					
6	Kadgong		30					
7	Kerten		350					
8	Shâit-tu-lacum		300					
9	Sheréah		6,580	Total.			Produce cocoanuts, and are visited for the coir and nuts by boats from the other islands.	
10	Tátácum		Uninhabited.					
11	Soilee							
12	Tennâkerry							
13	Bangâram							
14	Bâtterá							
15	Cabaretœ Feetœ	unclaimed.	Islands forming sand-banks.				As yet uncovered with vegetation.	
16	Kâlpanœ-Feetœ							
17	Ākhatœ Feetœ							

N. B. á, pronounced as in the French—fable.
â, its sound in the English—fate.
No. 7 and 11 as French words.

Each of the islands is situated on an extensive coral shoal and contains from 2 to 3 square miles superficial area. Their surface is flat and no part of any of these formations is more than 10 or 15 feet above the level of the sea. All round a more or less extensive fringe of coral reef extends broader and more shelving on the west, where the island naturally most requires protection, and narrow and abrupt on the east.

The outer edges are higher than the body of these shoals and extending in a semicircle at a distance of 500 yards to ¾ of a mile round the west, enclose a regularly formed lagoon, in which the water is so still, that in the worst weather coir may be soaked within the low water mark without danger of being washed away. The body of the island is the more perfect development of the eastern and protected side of the coral formation.* The same feature characterizes all these shoals and leads to the conjecture that they rose to the surface in the form of circular or oval shallow basins, and that under the protection of the shoal the east rim gradually developed itself towards the centre and formed an island. This conjecture is strengthened by the fact that in some of the islands this gradual increase towards the lagoon is still going on.

The receding tide leaves the outer edge of the reef nearly dry, and the water gets out of the lagoon by two or three breaches in the outer rim, sufficiently large to admit the light native craft into the natural harbour, several feet deep even at low tide, which the lagoon forms.

Soil. The foundation of the soil in all these islands is a stratum of coral or lime-stone, which varying from one foot to one and a half foot in thickness, is seemingly above the highest level of the water, and of a piece with the whole shoal, stretches uniformly throughout the portion of the formation which is above water. Within, this crust contains loose wet sand, and by removing a few spadefuls to allow the water to accumulate a pool of fresh water may be obtained in any part. All the wells, tanks and

* According to Lieut. Wood, Anderot is an exception to this general characteristic. "The other islets are situated to the leeward of their respective reefs, whereas Anderot not only presents a bold front to windward, but *that front* is one side of the island itself and not a reef as is generally the case, the coral reef on which it is based projecting to leeward instead of to windward, S.W. being considered the prevalent direction of the wind."

pits for soaking coir, where soaked in fresh water, are made by breaking through this crust and taking out the sand. The sand gradually presses towards this excavation, and from the constant removal of it some of the wells and tanks are very extensive under this vault of coral. The water in these wells is quite fresh but is affected by the tide, rising and falling several inches, the effect probably of the increasing and decreasing external pressure on the porous cistern in which it is contained. Water is abundant and never fails, but is said not to be very wholesome.

Above this crust, the soil lies to a depth varying from two to six feet and is generally composed of light coral and sand, finer but quite as dry as common sea sand. In some parts the soil is entirely composed of small loose pieces of coral without any other soil, and thus is said to be particularly well adapted to the cocoanut.

The surface of the soil is naturally so barren that there is little or no spontaneous vegetation in most of the islands, and though during the monsoon some small crops of coarse dry grains are produced, their scantiness shows that the prosperity of the islands must ever depend on the cocoanut.

Inhabitants.

The inhabitants are now Moossalmans, but are probably of pure Hindoo origin from Malyalah. The tradition preserved among them is that their forefathers formed a part of an expedition from Malyalah, which set out for Mecca in search of their apostate king, Bharman Permal, and was wrecked on these islands. They certainly were Hindoos for a long time after their first settlement, and were probably converted not more than 250 or 300 years back.

They retain some of the general distinctions of caste as well as the law of *alya santan** but with some local modifications. This law is still adhered so strictly on the island of Ameendevy, where distinctions of caste and a numerous population have been obstacles to the gradual change by which the custom of regular filial descent is supplanting it on the islands of Kadamat, Kiltan and Chetlat.

In Ameendevy there are four castes, said to correspond with castes in Malabar. The Tarway and Tanakaporandony correspond with Namboories and Nairs—of these there are but a few families of the chief inhabitants; the two lower and more numerous castes are

* Descent of inheritance through the female line.

the Kadgaher and the Melácherry, and correspond with the fishermen and Teers of Malabar. The higher and lower castes at least do not intermarry. These distinctions are confined to the island of Ameeny, all the inhabitants of the others being of the Melácherry caste.

The people are quiet and inoffensive, many read and write, and some find employment on the coast as teachers and *mookries*. They also make good pilots and several have been so entertained on Arab ships. Their language is a dialect of Malyalum, which they write in the Arabic character.

The group was discovered by Vasco de Gama on his return from his first voyage in the end of the 15th century, and has probably been visited from time to time by ships on the Goa trade. It is even said that there were once European settlers on Ameendevy, one of the islands, the tradition probably arose from the detention of some shipwrecked crew, on the island where it is said they were murdered; there could be no inducement to European adventurers to settle there. Of their subsequent history the islanders seem to know nothing; but for some centuries they have been subject to the small kingdom of Cannanore—the circumstances which first placed them under that rule, are preserved among the islanders only in improbable and vague legend. Under the Cannanore rule, the system still obtaining in the islands which remain to the Beeby, extended over the whole group. The local management was entrusted to an officer on a nominal salary in kind, who lived on contributions, &c. from the islanders. Their powers were frequently abused, and it was the oppressive conduct of one of these Kavilgars, as they are called, towards the inhabitants of Ameendevy which produced the revolt of that island and the three others to the north of it in 1786 or 89. The islanders then brought their coir the staple produce of the islands to Mangalore, and proffered their allegiance to Tippoo's officers here. The supply of good coir was probably found at the time convenient, although it is said that several unsuccessful attempts were made to induce the islanders to return to their allegiance. At length an equivalent from the Cherical Rajah's territory was found for the Cannanore house by the Sultan, and Ameeny, Kadamut, Kiltan, and Chetlat with Bitra and the other shoals north of Ameeny remained in the hands of the Sultan. When the Cherical Rajah's territories were ceded to the British in 1792 the Rajah was

allowed to resume this equivalent, the islands still remaining under Mysore and attached to Canara. In the bond executed to the Honorable East India Company by the House of Cannanore in October 1798, these islands are specifically excluded and no mention of an equivalent is made.

"The Laccadivies being thus attached to Canara, came along with "that province under the dominion of the British; but as they had "constituted a part of the Mysore possessions at the close of the war "in which Tippoo fell, and the Beeby had not previously the slight-"est prospect of recovering them, her claim in 1803 to the north-"ernmost, not being ruled by the laws of nations, stood in need of "indulgent consideration, the result was, that the claims were "declared inadmissible on the ground that she had no right to be "placed by the conquest of Mysore in any other situation, than that "in which she would have stood had no such event taken place. "In addition to which it was thought inexpedient to vest the "Beeby with authority over the Laccadivies, under the declared "aversion of the islanders to her Government."*

Notwithstanding this determination the claim must have been persisted in, for a remission of revenue of 1,500 Pagodas (5,250 Rupees) was, I believe, sanctioned by the Court of Directors in compensation under date 27th June, 1822, and is now remitted as *enam-jaree* from the assessment paid by the Beeby to Government in Malabar.

The salary of the Kavilgar of the Beeby's island is I understand, a nominal one still, of 12 to 15 *moodas* of rice per annum, and the appointment is conferred for a *nazzer* of 50 to 70 Rupees. His household and other expenses are probably found by the islanders, and he is allowed to exact a considerable per centage on all that is introduced into the islands, and on the small surplus produce which they export; besides appropriating all the tortoiseshell and ambergris got by the islanders, with various other little perquisites given up by us on assuming the management of the northern islands in 1805.

The condition of the islanders attached to Canara is perhaps as good as it could be, where the soil is so poor; and the advantages of their condition is the more felt by our islanders from the contrast being so near. Entirely exempted from direct burdens on the land and all official interference, they have a ready and never failing

* Hamilton's Gazetteer.

market for their principal surplus produce at fair and unchanging prices. Communication being open during three or four months of the year only, were their whole surplus raw produce on their own hands, they might find difficulty in watching the market, and the same cause would render it easy to cheat and oppress them. In practice at least they are quite unaffected by the salt monopoly, and the tobacco monopoly only reaches them indirectly by enabling the smugglers of Bengal tobacco to demand higher prices than a mere remuneration.

In the islands subject to Cannanore all surplus produce of cocoanuts as well as of coir is monopolized by the rulers for the former, the islanders are paid 4 Rupees per 1,000, probably 50 per cent. below the market value, for the latter only 11¼ Rupees per candy are allowed. A good deal of land also, I understand, is cultivated on account of the Beeby by her Kavilgar probably mainly by means of pressed labour. Intercourse between the islands is a good deal discouraged as our islanders smuggle for the Beeby's subjects. The population of the Beeby's island is stated to be about 3,000.

Rights to the Soil, Grants, Nazzers, &c.

The proprietary right in the soil seems never to have been a question of much importance on these islands. Unable at first to pay any assessment, the monopoly of the surplus produce became originally the fund from which a revenue was derived, and soon proved more productive than any equitable assessment. As increased production only could augment this fund, every facility for the occupation of waste land seems to have been afforded. *Nazzers* were never demanded and no traces of grants exist, or were ever heard of. No enclosures or land marks exist throughout the islands except in the *tot* of Ameendevy, nor does it appear that there ever was any system for the occupation of waste land. Each ryot planted as he was able, and claimed no other right than that of replanting where his tree had formerly stood. The properties in trees are consequently detached, and intermixed in the most extraordinary manner; often single trees at great distances from each other and known only to the proprietor. The custom prevails of marking the trees with certain house marks, as we do sheep in large droves belonging to different owners. In Ameendevy where the whole soil has been long fully occupied, immemorial enjoyment has given certain persons a prescriptive right to plots of ground, but on the other islands no proprietary right in certain parts of the soil as against each other is contended for, though strenuously and most

unreasonably sought to be substantiated as against our right to mark off certain spots of waste land with a view to introducing a regular system of granting it for cultivation. In the *tot* of Ameendevy which will be described afterwards, it was probably otherwise—it was kept for other than cocoanut cultivation. The crust of coral could only be removed with great labour, and a regular system of land marks here too exists. Still, no grants of this land are forthcoming and I have not been able to discover how the families now enjoying it came first into possession: immemorial enjoyment seems the only claim. This is the more extraordinary, as its produce under the coir monopoly system, could yield nothing towards the support of the Government. Small *nazzers* of 4 to 8 *hoons** were required on the death of each of the head inhabitants (*Karomar* or *Moopah*) for the continuance to their families of small local rights such as sitting at the *koots* or *panchayets*, wearing certain ornaments, carrying umbrellas, &c. but no grants of land ever accompanied privileges.

Sales, Mortgages, Leases, Rents, &c.

No proprietary right to land existing, perpetual alienation is quite unknown as yet. On trees, mortgages are secured, at the rate of one rupee per tree of good quality, the mortgagee entering on possession. Bonds or documents of these transactions have never been preserved; the recollection of the principal inhabitants and oral tradition are the only guarantee for these rights. The fall of the tree is equivalent to the redemption of the mortgage.

The principal inhabitants, varying in different islands from 10 to 20 individuals, own generally considerable numbers of trees—the greater part of which they prefer keeping in their own hands. Most of the inhabitants, however, have small independent properties in trees—for where no proprietary right was acknowledged or claimed in the soil each individual became an owner for the trouble of planting. The larger tree owners let trees to those, who have none, on service rents only, stipulating that the tenant shall carry on his master's dry cultivation, serve in his boat, &c. and though he has the enjoyment of the whole produce of the trees, and receives also the price of the coir produced on them, he is obliged to export all his coir on his master's boat. If a *neera* drawer (*neera* is the local name for the unfermented juice of the cocoa-palm used by the islanders as a drink

* Pagodas.

or boiled down into jaggery) he supplies his master's family with one-third of the raw produce, boiling the rest down into jaggery which he sells entirely on his own account. This is the only species of produce rent existing on the island. Money rents are as yet quite unknown and generally rents may be said to be confined to labour rent.

The facilities of becoming owners or establishing themselves on less thickly occupied islands are so great, that these tenants enjoy, of course, favorable terms, and the allowance is generally from 30 to 50 trees per man. Quarrels between these tenants and their masters are there the principal source of dispute.

It seems too to have been customary, for the poorer families in former days, to put themselves under the protection of the richer, engaging to send their coir to the coast in their boats and to work as *Kalassies** on these occasions. In many cases also these good will services were mortgaged. The former was probably necessary under the Native Government, but these are claims which the dependants are now often unwilling to acknowledge, and give rise to frequent disagreements.

Dry Grain.

The cocoanut may be said generally to be the only production which can be taken into account, for with the exception of a small quantity of plantain and dry grains produced in the *tot* of Ameendevy, and other agricultural production is very insignificant. On some spots not yet occupied by trees a little coarse grain is sown during the monsoon but the quantity is very limited; and its value certainly not greater than that of the *hakkal*† cultivated in this district.

The Cocoanut.

Like all fishing communities, the generality of the inhabitants are very poor, and prefer that agreeable employment or pastime to the labours of agriculture. The soil is however so well adapted by nature to the cocoanut that the life of the tree and at least a certain degree of productive power seem to be quite independent of agricultural attention, artificial manuring or frequent watering. In most of the islands it is necessary to rear the plants with some attention for the first year, and after transplanting, to water them for a few weeks till they strike root, the tree is then left entirely to itself and comes into bearing at periods varying, according to the situation and soil as well as in different islands, from

* Or Sailors.

† The most inferior kind of dry land.

10 to 20 years; it will then continue in full bearing for 70 or 80 years. Some were pointed out to me which were confidently asserted to be upwards of a century old. The full grown trees are never watered.

The tree is not so large and strong as that of the coast, and the nut about two-thirds of the size only, and rounder in shape. The husk is smaller and less woody, and the fibre finer and more delicate, but stronger than that of the coast nut. The nut also is said to be more compact and oily and to keep better than the coast nut, although for the sake of the coir, the nut is cut before being quite ripe. It seems doubtful whether more manuring and watering would make the tree more powerful and the fruit larger, but a very little more attention would make the tree much more productive. The palmyra and date palms are unknown on these islands.

The productiveness of trees depends on the soil and situation. Trees on the dryer parts of the islands, with a westerly or south-westerly exposure are of little value, while in the beds of old tanks and where the coral has been removed, or with an eastern exposure, trees are highly productive. In the different islands, the average produce varies, that of Kadamat and Kiltan stands a fifth or sixth higher than that of Ameendevy or Chetlat. In describing the islands separately the probable average fixed by the islanders themselves whom I questioned on this subject, will be mentioned.

Produce.

The Natives state that the cocoanut palm should throw out one leaf and a flowering branch once a month, but this is an exception of rare occurrence, and the best tree will only produce 9 or 10 flowering branches a year, bearing on an average 15 to 20 nuts, while the annual produce of other trees will not exceed 50 or 55 nuts, a general average of 60 or 70 nuts per tree per annum would probably be a pretty fair one for the islands taken together.

Its value.

The principal food being the cocoanut by far the greater portion of the produce is consumed at home, but for the small quantity they are enabled to export prices varying from 6 to 8 rupees per thousand are obtained, if, after making the necessary deduction for the expense of transport to the coast, &c., we take 5 rupees per thousand as the value of nuts on the island, it will be a fair average, and give the value of the cocoanut produce of a tree from $\frac{2}{3}$ annas to $5\frac{1}{3}$ and that of 100 trees about 30 rupees.

Coir and methods of soaking.

As the husk gets hard and woody if the fruit is allowed to become quite ripe, the proper time for cut-

ting it is about the 10th month: if cut before, the coir will be weak, if later, it will be coarse and hard, and require to be longer in the soaking pit,—it will be difficult to rid it of the woody particles, and it will be darker in colour and more difficult to twist. When cut, the husk is severed from the nut and thrown into soaking pits to loosen the woody parts. In all the islands, except Ameendevy, the coral reefs beyond the lagoon are well formed and protect the shores of the island from the surf; their soaking pits are therefore holes in the sand just within the influence of the astringent salt water. In these the husks are buried and lie for a year, and are kept down by heaps of stones thrown over them to protect them from the ripple. The island of Ameendevy occupies nearly the whole of the shoal on which it stands, and its shores are but imperfectly protected; the soaking pits are consequently all fresh water tanks under the crust of coral. In these the water never changes and the decay of a quantity of vegetable matter makes it foul and dark coloured: this tinge is imparted to the coir, and is the cause of frequent complaint by the buyers of the coir, but one over which the islanders have no control. A further effect of the fresh water is to weaken the coir in some degree. When thoroughly soaked the fibrous parts are easily separated from the wood by beating—if taken out of the pits too early the coir is difficult to rid of impurities: if neglected too long the fibre will be weakened.

Use of coir in petty traffic and its effect.

In these islands coir is one of the chief commodities of barter for the necessaries of life—rice, salt, tobacco, &c.—and the temptation is naturally great to take the coir from the pit before the wood is perfectly rotted, and twist it hastily up to meet more immediate necessities. As the Government receives it by weight and at certain fixed rates, the quality, colour and care in twisting are scarcely considerations among the barterers. The coir is made up for their petty traffic in short *kuts* of a fixed length and weight, and at the end of the year these are collected and made up into lengths of 70 to 75 fathoms as received by the Government. The making up the Government remittance at a certain time every year is another temptation to anticipate the proper periods of cutting the fruit and soaking the husks. To these causes I mainly attribute the dirty and ill-twisted state of Ameendevy coir, which is so frequently complained of. There the population is greater and consequently the use of coir in this way most general.

Quantity of coir produced and its value.

The difference in the quantity of coir manufactured from a coast nut and an island nut is very considerable. Three large coarse coast nuts will yield one lb. of coir measuring 22 fathoms, whereas 10 small fine island nuts go to about a lb. of coir; but this will measure 35 fathoms; 2 lbs. of such yarn measuring from 70 to 75 fathoms are made up into *soodies* of which there are fourteen to a bundle averaging about a maund of 28 lbs. A Mangalore candy of 560 lbs. will therefore be the produce of 5,600 nuts and should contain about 20,000 fathoms of yarn. Thus if the annual produce of a tree be about 60 or 70 nuts, on an average, a maund would be the produce of 4 or 5 trees and the candy that of 80 to 100 trees. The actual price of coir received by the islanders is about 13 rupees per candy; the produce of 5,600 nuts: the value of the coir produce of a tree would therefore be from 2 to $2\frac{1}{2}$ annas, and that of the produce of 100 trees from 14 to 15 rupees. The average value of the total raw produce of a tree bearing fruit would thus be 7 annas to $\frac{1}{2}$ a rupee, and that of a plot of 100 trees about 45 rupees.

Manufacture of Coir.

The manufacture of coir is entirely entrusted to the women, the male population being frequently absent on fishing expeditions, or engaged in navigating their boats during the season to the coast. The women never leave the islands and seem industrious. When the coir has soaked sufficiently long, it is taken out of the pit and beaten with a heavy mallet, when quite clean, it is arranged into a loose roving preparatory to being twisted; which is done between the palms of the hand in a very ingenious way so as to produce a yarn of two strands at once. No mechanical aid, even of the rudest description, has yet found its way into these islands.

Neera, Jaggery, &c.

A considerable number of trees are cut for the juice, which is much used in its unfermented state by the islanders. They are still so strict in the abstinence from all fermented liquors, that the manufacture of toddy would not be tolerated in the islands. The juice is drawn frequently, and fermentation is checked by chunam. When this *neera*, as it is called, is used in the raw state, it is drunk warm, and is sweet and thickish and said to be very nutritious but it is not wholesome for strangers. What remains after supplying the demand of the raw article is boiled into jaggery. The jaggery of these islands is in a partially liquid state, but appears highly granular and seems to contain a considerable quantity of saccharine matter. It is a good deal used on the coast.

Quantity and value.

A tree yields from $\frac{1}{5}$ to $\frac{1}{2}$ a seer of *neera* per diem, and bleeding for 6 months of the year, will produce 60 to 90 seers of the juice. This will yield after boiling 6 to 8 seers of jaggery, which at the rate of 1 anna or $1\frac{1}{4}$ anna per seer would give the annual produce of the tree a value of 6 annas to half a rupee, when the trouble of cutting the trees, and gathering firewood is considered it will be seen that this species of cultivation is not so lucrative as that of the nut and the manufacture of the coir. Our islanders consequently do not manufacture enough for the home consumption, but import from the Beeby's islands of Androt and Kouraty where large quantities are manufactured—probably the consequence of the system pursued there. Both cocoanuts and coir are there under monopoly, 11 rupees per candy being paid for the latter, and only 4 rupees per 1,000 delivered on the coast; for the former their value on the island would therefore not much exceed 3 rupees per thousand, and the value of the average gross produce of a tree producing fruit would at this rate not exceed 5 annas, and that of 100 trees but be within 20 rupees. Under these circumstances it is probably found that the boiling of the jaggery is the more profitable. This class of trees contributes nothing towards the revenue of Government under the present system. The general effect of cutting is to weaken the trees but it is often beneficial, where, from over-exuberance, trees shed their fruit as soon as the flowering branch bursts.

The island of Ameendevy.

Ameendevy, the principal and most populous island of the group, is attached to Canara and is now the residence of the Monigar in local charge of the islands. The length of the island may be 2 miles by $\frac{3}{4}$ in breadth. It is low and the surface very even, but unlike, the other island is so imperfectly protected by the reefs on which it stands, that the soaking of coir among the sea sand is impossible.

The island is divided into four grams—Pullakerry, Yeduct, Porakery and Kodacherry; divisions, originating probably in the local privileges of certain principal families, but the people live scattered throughout the island. The principal inhabitants of this island have an acknowledged superiority, and exercise considerable influence over the inhabitants of the other islands. They appear pretty comfortable. Their houses, built of slabs of lime-stone and thatched with cocoanut leaves, contain several rooms and have out-houses at-

tached. They have generally some cows, sheep and chickens, still the greater part of the population is poor.

	Population.		
	Male.	Female.	Total.
Ameendevy. For 1831..	944	994	1,938
,, 1839..	1,081	1,161	2,242
,, 1844..	1,142	1,173	2,315

The statement in the margin, the last entries of which I believe to be pretty correct, shows an increase of nearly 20 per cent. since 1831 in the population of this island. It is now nearly double that of all the other islands put together.

The soil of Ameendevy is poorer naturally than that of Kiltan or Kadamat, and, the consumption in various ways of the fallen leaves by its dense population, robs it of the advantage of a natural manure which the others possess in some degree. Some of the trees in Ameendevy are most advantageously situated, but the punchayet of islanders examined by me set the average gross produce of a tree at 60 nuts per annum ; an average somewhat larger than I could arrive at by making actual experiments. The statement in the margin would lead us to conclude that the plantation had been perfectly stationary for 20 years, but these statements cannot be implicitly relied on. In Ameendevy there is very little to be done now in the way of plantation, the greater part of the island is a perfect thicket of cocoa-palms, but quite clear of underwood, and that which remains unoccupied is of little or no value and in exposed situations.

	Cocoa Plantation.			
	Total Trees.	Chouk or unproductive Trees.	Young Trees and Plants.	Total productive.
Ameendevy. For 1827..	67,534	2,745	20,716	44,073
,, 1831..	71,616	1,589	23,358	46,669
,, 1839..	65,243	7,660	20,942	36,341
,, 1844..	64,172	4,052	15,891	44,229

N. B.—The *chouk* trees are excluded in this statement.

The Tot or Kat.

In the middle of this island, over about 50 acres, the crust of coral already mentioned has been removed, and the whole centre of the island presents a fine low damp soil probably hardly above the level of the sea. The whole bears marks of a well laid and ably executed design, on which an enormous amount of labour must have been expended ; but tradition has preserved no account of the circumstance under which this vast and beneficial work was executed. All that is known is that, it was com-

pleted while the inhabitants were still Hindoos. The soil of this *tot** or *kat* is light, sandy and poor, but, water lying within a foot or so of the surface, it is fertile. The cocoanut trees planted in or about its edges are exceedingly fine, but it has been hitherto reserved chiefly for the cultivation of dry grains as *loba*,[1] *jowa*,[2] *badag*,[3] and *raghee*,[4] with some kind of vegetables, as the sweet potatoe and a kind of yam—considerable numbers of plantain trees too are reared within it. This land is strictly private property, and though none of the gardens are enclosed, the boundaries are well defined by stone land marks. It is by far the most profitable land in the island, and produces probably a fifth of the food used there, but it contributes nothing, and probably never did, to the revenue of Government, under the monopoly system. While the profits of the monopoly of the other produce were great, this land was left unburdened as a compensation, but it might now be well to take its condition into consideration. Round the edges of the *tot* the bread-fruit tree grows most luxuriantly, and the number of trees is increasing, as shown in the margin.

In 1831—438
,, 1839—834
,, 1844—853

Soopary Trees.

In 1831—389
,, 1839—440
,, 1844—322

I observed a considerable number of Soopary trees interspersed among the cocoanut trees round the edges of the *tot*, they seemed fine, and I think much more numerous than shown in the native returns—but the Islanders manifested great unwillingness to give any information about them. I learnt however that the tree was introduced lately, and thrives well. I think the whole *tot* might with great ease and profitably be converted into areca-nut gardens.

Other Trees.

The *undel*[5] and *potang*[6] bushes are cultivated, the one for its oil, and the other for its dye, and several cwts. of the fruit are exported yearly to Malabar. The lime of Ameendevy is remarkably fine and the trees numerous.

Unoccupied land.

The *tot* corresponds with the oblong shape of the island, and occupies the whole centre of the island. On all sides it is surrounded by dense cocoanut plantations. Round from the east to the north of this island (the least exposed sides) this plantation runs down to the sea side, but along the west, lies

* *Tôt*, quere from tòta—a garden ?

1 *Dolichos sinensis.*
2 *Holcus sorghum.*
3 *Panicum semi verticillatum.*
4 *Cynosurus corocanus.*
5 *Ricinus communis ?*
6 *Bixa orellana ?*

M

a strip of waste land about 200 yards in breadth between the plantation and the shore—and round to the south-west and south end of the island many acres are still waste : the exposure is too much for young trees, and the dry sand is deeper than elsewhere. This space was at one time walled off for the cattle, which are very destructive to the young trees, and were not allowed to graze among the trees. The wall has fallen, but may yet be traced, and till within 20 years no plantation existed within this enclosure, but all the eligible spots such as the beds of old tanks and holes have now been planted and are claimed by the owners of the trees.

I examined the principal and disinterested inhabitants, who declared this an encroachment, and that all land unoccupied when the islands came under the British rule, was liable to be recovered as *circar* waste, and to be given on *hossagamy** terms, but that such had not been the usage of the islands. These trees may either now be assessed or the encroachment be overlooked, and better care of this land be taken in future. I do not think it probable, that this land will ever be much in demand, for it is of the poorest description, and would not remunerate the cultivation unless given in the lowest terms, and years must probably elapse before the increase of population will force it into cultivation.

The Monigar has been ordered to mark off all these spots with stones and carefully to prevent encroachment in future. The whole may amount to 50 acres.

There are so called Circar gardens in this island, which will be introduced afterwards.

Island of Kadamat. Kadamat lies due north from, and within sight of Ameendevy at a distance of 6 or 8 miles.

The coral formation on which this island stands is the most extensive of those I visited, and the lagoon enclosed by the reefs is very large, well stocked with fish, and much frequented by the people of Ameendevy on that account.

Soil. The island is long and narrow probably 3 to 3½ miles long by three-fifths of a mile broad. The body of the island appears generally lower than that of any of the others, and has an excellent natural protection against the weather in a ridge of low sand drift which runs down the west side. The superficial area of this island must be considerably greater than that of any of the

* *Hossagamy*, a native term for land newly recovered from rivers, &c.

others, and the natural fertility of its soil exceeds all, except that of Kiltan which it quite equals. It is however in a wretchedly backward state, with hardly an eighth part of the soil which might be most advantageously taken in, cultivated.

		Population.		
		Male.	Female.	Total.
Kadamat.	For 1831..	38	38	76
	,, 1839..	60	54	114
	,, 1844..	71	62	133

The return of population for 1844 shows an increase nearly 75 per cent. on that of 1831. The inhabitants are very poor, shy and spiritless, and are somewhat domineered over by their neighbours of Ameendevy, who exact certain services from them and plunder their trees when on fishing expeditions about the neighbouring shoal. Many of them are affected with blindness, and the worst description of leprosy and other gangrenous diseases prevalent throughout this group,—to be attributed possibly to the limited scope for seeking change of blood in their marriages, as well as to the unwholesomeness of their provisions, principally saltfish. Probably the island was once in a more flourishing state than it now is, and it is said that 70 or 80 years ago, it was visited by an epidemic which thinned their numbers, and entirely extirpated several families. The sites of several ruined houses are still pointed out in testimony. They certainly had then two shore-going boats, and exported their own coir ; for the transport of which they are now entirely dependent on Ameendevy, as they possess only small fishing boats themselves.

Condition of Inhabitants.

State of the Plantation.

The cocoanut cultivation is limited to a strip across the middle of the island, leaving by far the greater portion of the island, divided in about equal portions on both sides, unoccupied. The southern portion of the island is covered with a thick jungle of underwood, which might be removed with the greatest ease. The western portion is open plain, covered with weeds and low bushes. The soil is light and sandy but naturally damper and firmer than that of Ameendevy, and the productiveness of trees where the island has been planted, proves that were the whole under cultivation, it might support a population at least equal to that of Ameendevy.

The average produce of trees in this island may safely be set at 80 nuts per annum, and coming rapidly into bearing, they require no attention while growing. The statement in the margin shows

	Cocoa Plantation.			
	Total Trees.	Chouk or unproductive.	Young Trees and Plants.	Total productive.
For 1827..	2,936	66	1,126	1,744
,, 1831..	4,729	237	2,731	1,731
,, 1839..	2,401	138	915	1,348
,, 1844..	3,319	153	804	2,362

N. B. The *chouk* are excluded in this statement.

a small advance in the plantation, but a perfect trifle when compared with the capabilities of this island. The coir produced on it is of the very best description, and is all sea-soaked, but the yearly produce cannot be ascertained as it comes to the coast mixed indiscriminately with that of Ameendevy, and is entered in the accounts as Ameendevy coir.

Dry Cultivation. There is no *tot* or *kat* in this island where the substratum of limestone has been broken up, but its natural soil is the most favorable to dry cultivation to be found on the group, and a considerable portion of the dry grain raised, is grown in this island. The people from Ameendevy go there and cultivate during the monsoon, *raghee*, *jowaree*, and *loba*.* Under the present system, this species of cultivation escapes the contribution of its quota to the revenue, while it no doubt retards the advance of the cocoanut plantation in this island, which does contribute.

Condition. The Island is still in a most backward state, and of all most claims attention with a view to raising the condition of its inhabitants, as also securing the interests of Government. It is capable of becoming the most valuable of the group as well from the nature of the soil, as the extent of land. At least by nature 20 per cent. more productive than Ameendevy and fully equal to Kiltan, scarcely one-eighth part of the island has been planted, it lies near the former over-peopled island, whose inhabitants are already dependent on it, for part of their dry grain, and is at no great distance from the fully planted island of Kiltan whose inhabitants will perhaps extend their enterprize here in course of time. With this view it might be of great advantage to allow the islanders a small *tuccavy*† to enable them to build a couple of shore-going boats, this would make them at once independent of the people of Ameendevy, save to them a large amount of freight which is exacted for taking their nuts and coir to the coast, and much improve their spirits and stimulate their energy; such an advance would be most gratefully received and easily and regularly recovered. The bounds of the cultivation

* See Notes p.19. † Advance of money.

as it now stands have been carefully, but I hope liberally, laid down during the last year, with a view to placing the occupation of waste land under some system. The extent of the dry cultivation should now be accurately ascertained and the claims of the people of the island of Ameendevy to proprietary right in some spots of land now claimed by them, examined. However the whole dry cultivation of the island is probably not above 10 or 12 moodas of seed extent of land, and its value will not exceed that of *hakkal** land on the coast so that any assessment on it would be so trifling, as to be scarcely worth weighing against the discontent which its novelty would create; unless it were expedient as a restrictive measure to force the cocoa-plantation.

Island of Kiltan.

Kiltan lies about 20 miles from Ameendevy in a north-easterly direction, and though the least, is at present the most thriving and active island in the group. When the ship *Byramgore* was lost, a large quantity of treasure found its way into this island, and the greatest activity in planting has since been evinced, and the generality of the inhabitants seem well off.

The superficial area of Kiltan may be about $1\frac{1}{2}$ square mile, and the reef on which it stands is extensive. The lagoon is large but shallow and is rapidly filling up, and even now, there is not sufficient water within it at low tide to float one of the native *koondras*, if laden—within the last 50 years many feet of land have been gained towards the lagoon. The reefs are sufficiently extensive to protect the shore effectually, all the coir is soaked in the sea sand and trees are planted to the water's edge on every side.

The population of the island as shown by the marginal statement, has increased within the last 15 years from 35 to 40 per cent., but it is still far below what the island could support and does not afford hands to make up the coir now grown. The whole population as that of Kadamat and Chetlat is of the Malachery, the lowest caste; they have the appearance of considerable comfort, and few really poor are to be found in this island. Its inhabitants are by far the most cunning and difficult to manage, and evince considerable dislike to any inquiry being made into their condition.

	Population.		
	Male.	Female.	Total.
For 1831..	224	241	465
„ 1839..	263	268	531
„ 1844..	316	323	639

* The poorest kind of dry land.

	Cocoa Plantation.			
	Total Trees.	Chouk or unproductive.	Young Trees or Plants.	Total productive.
For 1827..	29,975	2,102	19,851	8,022
,, 1831..	34,428	1,207	23,433	9,788
,, 1839..	27,100	3,630	11,823	11,647
,, 1844..	29,297	2,525	11,855	14,917

The statement in the margin shows the state of the cocoanut cultivation on this island. The column "total productive trees" shows their number to have nearly doubled since 1827, and the column "young trees" testifies to the activity with which the planting goes on. The exactness of these native returns however I fear cannot be relied on. The counting of trees on these islands is a business of great difficulty, for they are perfect thickets without land marks of any description, besides which a good deal of care and attention is requisite in classifying the trees. Our *sibbendy** is so weak that the Monigar is unable to conduct this computation in all the islands, and it is deputed to a *peon* and eventually to the Islanders themselves who probably (and especially the cunning fellows of Kiltan) understate the numbers. The establishment is perfectly large enough to perform all its duties, this only excepted, and a small *hangamy*† establishment sent over once every 5 years would be quite sufficient to keep up a very accurate knowledge of the state of these islands—for no material changes can take place in cocoanut plantations in less than 5 years. These remarks apply more or less to all the islands.

Cocoanut Plantation.

The whole island is given up to cocoanut plantation. The bread-fruit tree, soopary and lime tree do not thrive, and there is no *kat* where the stone has been broken up. Dry cultivation has gradually given way before cocoanut cultivation and may be said now hardly to exist on this island, but under cocoanut plantation the soil is remarkably productive. The limited population cannot consume the leaves, and the ground in some parts is covered with decaying vegetable matter most beneficial to the trees. In other islands, it is necessary to rear plants for one year with care and then transplant them; in this, a nut buried with a knife will grow, requires no attention, and comes into bearing early. The average annual produce may be taken at 80 to 85 nuts per tree, and in many parts I observed trees, where it had been necessary to support the luxuriant growth of fruit, artificially.

Coir—probable waste.

The hands in this island are unequal to making up into yarn all the coir produced, and with a large surplus

* Fiscal Establishment. † Temporary.

produce of nuts to look to, and exchange for rice, the laborious manufacture of coir is somewhat neglected, and a vast number of husks are wasted. The average number of bearing trees in this island during the last 7 years was upwards of 13,000, the produce of which, taken at an average of 80 nuts per tree per annum (a low average) should yield, at the rate of 5,600 nuts to a Mangalore candy of 560 lbs., fully 195 candies—the average yearly import from this island of coir, for the same time has been 146 candies, to which add 5 per cent. for home consumption and the quantity produced would appear not to exceed 155 candies, or 45 candies below what it should be. When examined the Islanders averaged the daily consumption of nuts at 5 per man (for in this island there is no coarse grain.) The average population during the last 7 years was 585, for the support of which 10 lacks and a half of nuts would be requisite. The exports of nuts may be taken at 2 lacks per annum, and the calculation will give within half a lack of nuts of the result of that on the produce of the trees and show that about 20 per cent. of the coir grown remains unmanufactured. This might be urged as an argument against a system, in which the Government interests are left so unprotected. The coir which is imported from this island is of the finest description.

Little unoccupied land now remains on this island and such as did so, is the least promising there—some years ago one spot was marked off by the Monegar, and plantation within it already swells the amount of *hossagamy* cultivation; had the plan been more vigorously carried out, a good deal would doubtlessly have been under Government management which the Islanders now enjoy as their own. What now remains has been in part carefully marked off, but against the will of the Islanders.

Island of Chetlat.

Chetlat the most northerly of the group lies about 15 miles distant from Kiltan and 25 to 30 from Ameendevy. The shoal on which this island stands is extensive, the lagoon is large and very perfect and the shores well protected.

The island is from 2 to 2½ miles in length and about ¾ of a mile broad. The surface is not so even in the other islands, and a ridge of low sand drift running up the middle prevents or at least retards the plantation in this island. Though not in nearly so backward a state as Kadamat, it is naturally the least promising of the islands. The soil is very poor, the trees very slow of growth and not productive. Low mounds of sand occupy a great part of the centre, and best protected parts of the island, on which nothing grows,

except scanty crops of a plant called *teerny* on the roots of which a small ball about the size of a pea grows, after the plant has withered—these are gathered from among the loose sand, and used by the Islanders. Dry cultivation on this island is very insignificant.

The native returns of population show a considerable increase since 1831, but I am not inclined to place much confidence in them. The inhabitants are all poor, but quiet and well behaved and devote most of their time to fishing, as the returns from plantation are not sufficiently large to induce them to take much pains with it.

	Population.		
	Male.	Female.	Total.
For 1831..	140	213	353
1839..	234	237	471
1844..	263	259	522

The returns of plantation in this island are very inaccurate, as must be seen on comparing the returns of 1831 with those of the other 3 years. In 1839 and 44 the young and still unproductive trees are entered as upwards of double the number of the productive. Eight thousand is certainly far short of the number of the latter, and the progress of plantation is not nearly so active in this island as the former would indicate. I think that at least two-fifths or a half of these "young trees" should have been brought under the class "productive," which should show from 13,000 to 14,000. This conjecture may be verified by calculations of the probable number of nuts necessary for the support of the population, and the number of trees that would be required to produce the coir annually exported; trees in Chetlat are very poor, and their average annual produce should not be taken higher than 50 nuts per tree, at which rate the produce of 14,000 trees would be required to support a population of 500 persons consuming four nuts per diem (an average below that stated by the islanders). The exports at the average of 7 years have been upwards of 80 candies, which with 10 candies added for home consumption would be the produce of 10,000 trees if the rate assumed for other islands of 5,600 nuts per candy of coir be retained. As in Kiltan a considerable quantity of the husks are wasted, to which must further be added the number of trees which are cut for the juice. All things considered, it is probable that the return of productive trees should be double what now appears.

	Cocoa Plantation.			
	Total Trees.	Chouk or unproductive Trees.	Young Trees and Plants.	Total productive Trees.
For 1827..	21,336	483	14,465	6,388
1831..	24,899	541	4,246	20,112
1839..	27,501	1,695	18,523	7,283
1844..	25,665	1,399	16,520	7,746

N. B. The *chouk* trees are excluded in this statement.

Unoccupied Land.

There is still a good deal of unoccupied land in Chetlat perhaps $\frac{1}{4}$th or $\frac{1}{5}$th of the whole, but it is generally the most worthless. This will be carefully marked off this year.

The coir exported from this island is of the first description.

Island of Bitra.

The island of Bitra alone remains to be mentioned, I was unable to visit it myself but endeavoured to learn all the particulars relative to it. The island itself is not half the size of the others described, but the shoal on which it is situated, is very extensive and abounds with fish, and is on that account much frequented by the islanders, chiefly those of Chetlat. The island is sacred to a *Peer* whose tomb stands in the middle of it, and there are from 150 to 200 trees planted round it as votive offerings to his name, the fruit of these is used by any of the fishermen who happen to land there. The greater part of the island is covered with a thick low brushwood among which, till within the last 10 years, extraordinary flocks of sea birds laid their eggs and bred. The Islanders told me that they have gathered from 30 to 50,000 eggs in a day. While these birds continued here, their eggs were a great support to the whole group, but not one remains, all having, without any apparent cause, migrated, it is supposed, to the Maldives. The soil is said to be excellent and the cocoanut tree grows rank and luxuriant, and would doubtless prove a most productive tree were its exuberance kept down by the regular and proper exercise of its powers.

Want of fresh water.

The want of fresh water has impeded the occupation of this island. When told so, I was incredulous and had the stone cut through this year where it was 5 or 6 feet thick, but the water within, which in all the other islands is quite fresh, was found, as the Islanders assured me before, quite salt. I was unable to see it myself, but report and experiment go to confirm a fact which must render this island unproductive for ever, for at a distance of 40 miles from the nearest island, and the passage impracticable for 5 months in the year, a population could never be supplied elsewhere. When the fishermen run short of water they dig a hole in the sand near the sea, and use the brackish percolations from the sea, in preference to the well water. This fact the Islanders attribute to the effect of the roots of the brushwood, and various other insufficient causes.

Sea Slug and Shark.

The tortoise is frequently taken while laying its eggs on this lonely island, and amongst its extensive

shoals great quantities of the *holothuria* or sea slug, of a better description than that found on the other islands, is found. During the fishing season, a good many of the Islanders are employed by coast Moplah merchants in the manufacture of what the Islanders call *coke* of this sea worm. Found on all coral formations which rise near the surface, it is here collected in great quantities, and half boiled in the water which it has imbibed, it is then laid out and dried in the sun, and in this state it is in good demand for the Chinese market at Bombay. The shark also abounds about these shoals, and several candies of fins are yearly exported from these islands chiefly taken in the neighbourhood of Bitra.

Circar Gardens.

In each of the islands there are so called Circar gardens which consist of lots of trees held by Islanders on a *darkast* or agreement to supply certain quantities of coir yearly to Government. These have been Circar gardens since the time of the Cannanore rule, when it was usual to confiscate property in place of penal punishments, for instance that entered third in the list of Ameendevy was confiscated for a murder committed by its owner. The history of them all seems to be well known to the principal inhabitants, and were in future any system adopted under what it would be advisable to return these, properly assessed, to the descendants of the original proprietors, their heirs might easily be traced.

The following statement exhibits the number and value of the Circar gardens in each of the islands.

	Total Trees.	Bearing Trees.	Past Bearing.	Young Trees and Plants.	Bread Fruit Trees.	Supary Trees.	Government Share per Annum.		
	No.	No.	No.	No.	No.	No.	Mds	lbs	
Gardens in Ameendevy, - -	391	291	0	0	0	0	18	0	Page 18.
Do. in do.	410	299	0	0	9	16	18	0	Page 20. In this garden there are 120 young plants which will soon be in bearing.
Do. in Kiltan,	380	228	0	148	0	0	6	0	Page 23. 4 chouk trees are excluded.
Do. in Kadamat, - -	152	148	0	0	0	0	9	0	Page 23.
Do. in Chetlat,	206	142	0	61	0	0	9	14	Page 26. Chouk trees are excluded.
Hossagamy Trees in Ameendevy,	539	402	30	107	0	0	19	0	Page 20.
Total..	2,078	1,510	30	316	9	16	79	14	

Other exports from the islands.

The staple export from the islands, and the chief source of the income is coir, but they have a few other sources which may be well to mention here, before describing the coir management on the coast of these, the export of the surplus

Nuts.

nuts is the chief. No accounts of this have been kept, and we must rely on the statements of the people, who seemed ready enough to tell the probable exports of their neighbours though willing to understate their own. From 7 to 10 Rupees per thousand are obtained on the coast, but the nuts are small and the average

From Ameendevy.

prices may be taken at 8 Rupees. The people of Ameendevy assert that their surplus is decreasing, this they attribute to the increase of population in an island in which the good soil is all occupied, and consequently progressive cultivation does not yield proportionate returns. The exports from this island may be taken at one lac to 120,000 nuts per annum which, at 7 Rupees per 1,100 (for 10 per cent. is always allowed for luck in these sales) would be worth between 6 and 7 hundred Rupees. For this rice is always brought home, and exchanges at 3 to 4 maunds of coir per *moodah* of rice, making the profits nearly cent per cent to a man who exporting his own nuts imports rice. This traffic is limited by the home consumption, but is far the most lucrative from the islands, and in Kiltan, where the home consumption is not so great, its profits are so large and distributed among so few that the Islanders do not feel the absolute necessity of applying themselves industriously to the

From Kiltan.

manufacture of coir. The nut exports of this island (Kiltan) average from 1½ lac to 2 lacs per annum valued from 1,000 to 1,300 Rupees. The exports from this island

From Chetlat.

are increasing rapidly. From Chetlat the exports are within 50,000, and from Kadamat very trifling as yet and not to be distinguished from those of Ameendevy. The principal market is in Malabar. In the Beeby's islands the Ryots are deprived of this by a monopoly under which only 4 Rupees per 1,000 is paid for nuts delivered on the coast.

Mats.

A few hundred mats are yearly exported and prized on the coast, their texture being fine. They are made of the cocoanut leaf cut out of the heart of the tree just before it unfolds. This involves the loss of the bunch of fruit which comes out with each leaf; and the value of the fruit and coir in our island checks the manufacture of mats. Probably the leaves of *chouk* trees are

chiefly used. The sails of smaller boats are of these fine mats, and hence a considerable home consumption.

Chanks, &c.

Shells and chanks are hardly worth calling an article of export from these islands. From one to two hundred Rupees worth of tortoiseshell may be exported from year to year, of late years, there has been little taken. A few candies of shark fins are accumulated during the season, and exported to the coast. Ambergris is occasionally picked up and is valuable. This with tortoiseshell were formerly perquisites of the rulers, and in the Beeby's islands still, the finders are always deprived of them.

These Islanders do not manufacture *coke* (the dried *holothuria* or sea slug) of their own accord. Moplahs from the coast go to the islands and employ them at the usual rate of wages, one seer of rice per diem, to manufacture it for them. So that the profits of this are lost to the Islanders. I have no doubt that considerable traffic in chunam, which is very fine and white, might be carried on, and that the Islanders might supply chunam considerably below the bazar price on the coast, but they do not appear to have attempted to export it.

The Government islands import jaggery for their own consumption from the Beeby's, so that if the 100 or 200 seers which yearly come to the coast in their boats be the produce of our islands—its place is supplied by imports from elsewhere.

Boats.

The marginal statement shows the number of boats in each of the islands in the years 1839 and 1844, no earlier record of these numbers can be found. The first class are large shore going boats for carrying coir, &c. from 6 to 15 tons burthen, they will be worth 4 or 5 hundred Rupees each, and belong to the chief families. The increase of four of these expensive boats in Kiltan is a sure sign of its prosperity. In Kadamat there are none, and they are dependent on Ameendevy. The 2nd class are fishing boats of 1 ton to $1\frac{1}{2}$ ton burthen, which are manned by 8 or 10 men, but seldom leave the group; the last column shows the number of small boats for

		No. of large coast going boats from 6 to 15 tons.	Fishing boats from $1\frac{1}{2}$ to 2 tons.	Small rowing boats.	Total.
Ameendevy,	For 1839..	17	14	77	108
	,, 1844..	18	18	97	133
Kadamat...	,, 1839..	0	2	10	12
	,, 1844..	0	2	9	11
Kiltan.......	,, 1839..	8	12	59	79
	,, 1844..	12	11	73	96
Chetlat.....	,, 1839..	8	20	66	94
	,, 1844..	8	19	70	97

pursuing fish, as the Islanders use the harpoon almost exclusively in taking fish. The boats are all light coir sewed craft, built on the islands of wood brought from the coast. Cocoanut wood is never used as sometimes is asserted.

Cooly Hire, Freight, &c.

The rate of cooly hire in the islands is one seer of rice per diem (50 seers to a moodah) with the other little necessaries as betlenuts, tobacco, &c. altogether probably within one anna. Freight to and from the coast, is charged at ten per cent. on all bulky articles, as nuts, coir, &c. and levied on the return cargo of rice. This is divided at certain rates between boat owner and the *kalassies.*

Illicit traffic in Coir.

I am not inclined to believe that there is much clandestine traffic in coir from the islands. The imports to Mangalore will always be found to fall short of any calculation made of the probable produce of the "returned" number of bearing trees, but 5 to 7½ per cent. must be allowed for home consumption; a considerable number of trees are cut for meera and many nuts are used for drinking before the husk is formed, besides which, no doubt a large quantity of husks are wasted and not made up into yarn, particularly in Kiltan. The Islanders probably make up some coir into cables for their own use, which they may subsequently be induced to dispose of elsewhere, but the strictest inquiries I could make, lead me to believe that though I have heard some hints against the inhabitants of Kiltan, there is no extensive and systematic smuggling now. Since the value of coir has fallen it has been the interest of the Islanders to keep up the monopoly system under which their surplus produce has a ready and steady market. If the prices paid are not quite equal to what they might obtain elsewhere, they are paid with the greatest regularity and the Islanders are perfectly sensible that this difference does not press so heavily on them as would a regular assessment on the land or trees. I believe from these considerations they are jealous of any irregularity among themselves, which might endanger the continuance of the system. Pattamars never visit the islands, and ships avoid them if possible, a few only, from the southern harbours of India, going direct to Arabia, sight them but probably not more than 5 or 6 a year; and whenever a boat returns from a trip, she is drawn out of the water, and before being launched again it is necessary to obtain the Monegar's permission and a peon searches her before she starts. This may act as a slight check, though it may be evaded with the greatest ease, were it not their interest to avoid raising the least suspicion.

The whole of the salt consumed in these islands is imported from Goa, whither two or three boats are sent every season for the annual supply. It is there bought for $3\frac{1}{4}$ annas per moora, and is sold in the islands at 7 annas per moora, a price very much below what it could be got for in the Government godowns. The Beeby's islands are supplied chiefly from ours. The Islanders of Ameendevy stated their annual consumption to be about 800 to 1,000 mooras per annum, that of all the islands attached to Canara may amount to 1,500 to 1,800. The Islanders, who made no secret of this, said that they had always been in the habit of getting their salt from Goa, and quoted as a direct permission an order of 1840 directing the Monegar to release 100 mooras of salt which he had stopped, and reported for orders, and ordering that the Islanders should be permitted to import salt in the way they had hitherto been accustomed.

This smuggling has been winked at all along from a feeling that the enforcement of the monopoly would be attended with the greatest difficulty, and probably with most unsatisfactory results. A strict prohibition would contract the consumption of salt among the poor, who would use sea water in their cooking instead, as they now do when the supply is deficient, but possibly without forcing the body of the Islanders to seek their supply from the Government godowns. Every conceivable facility for smuggling exists in such islands. There is no commanding spot to look out from, and perfect thickets of trees, as they are, they may be approached by boats almost unperceived unless by a person on the shore and on the look out, from the low shore a boat is not seen above a few miles distant, and the Islanders are in the habit, when they wish to avoid the Government officers, of just sighting the islands from the mast head, and then lying to till after dark; they run in during the night and the cargo is safe before the morning. Were the *sibbendy* doubled, where the interests of the whole population are so perfectly at one as on this subject, their vigilance would scarcely prevent the illicit introduction, while, themselves personally interested in the introduction of a certain quantity and beyond the influence of effectual supervision, it is not improbable that these peons might be remiss in their duties. The Islanders would be burthened with an increased, and otherwise unnecessary establishment, while the advantage to Government would probably hardly pay the expenses.

With regard to tobacco the Islanders generally take a few maunds from the Government godowns for form's sake, but the principal consumption on the islands is of Bengal tobacco. On this point the Islanders were more reserved, and though I could not thoroughly trace its introduction, it seems to be through the Beeby of Cannanore. She probably has some traffic with Bengal, and supplies her own island, and from them it is introduced into ours. The prices are about $\frac{3}{4}$ of the Government prices and sufficiently low to induce consumers to prefer it. This also has been frequently reported by the local officers, and Bengal tobacco stopped, but it has been tolerated under the same considerations as influenced the directions with reference to salt, and the tobacco returned to the Islanders with a warning not to smuggle in future. It would be still more difficult to put a stop to this; less bulky than salt it is introduced in small quantities from the neighbouring islands and often about the person.

Sibbendy.

The management of the island is entrusted to a Monegar with the powers of an Ameen of Police, whose station throughout the greater part of the year is Ameendevy. He has 5 peons on pay of 5 rupees per mensem, of whom two are with him in Ameendevy and the rest distributed, one in each of the other islands. The Monegar sees that there is no clandestine traffic in coir from the islands, but he has nothing to do with the accounts, weighing, &c. of the coir and his duties are exclusively police. He has the assistance of one of the Islanders as a Karany to take down depositions, and to read them, for the character used is the Arabic. In addition to these duties the Karany has those of the Shanbogue or accountant; he keeps the accounts of the trees and the coir in the islands, and makes out and delivers the accounts of coir brought to the coast, in short he is the working man of the islands. His remuneration is 18 mooras of rice per annum worth about 27 rupees or little more than 2 rupees per mensem, and less than half of a peon's pay. It has always been an ill-paid office, but under the Beeby's rule the Karany, besides this nominal remuneration, had several perquisites which of course he does not now enjoy.

The expenses of the Sibbendy are entered in the margin, show an average for 10 years of 535 rupees per annum. The Karany's allowance is included which being paid in rice and varying according to the market value of the article, causes

	Rs.	A.	P.
1 Monegar per mensem...	17	8	0
5 Peons at 5 Rs. do.	25	0	0
	42	8	0
Per Annum....	510	0	0

Fusly	1243	535	0	0
,,	1244	535	0	2
,,	1245	533	10	9
,,	1246	537	6	11
,,	1247	535	13	2
,,	1248	546	14	10
,,	1249	541	8	0
,,	1250	537	11	9
,,	1251	532	9	10
,,	1252	532	6	2
	Total	5,358	4	7
	Average	535	13	3

in part the slight irregularity observable. For extraordinary occasions, such as the protection of wrecks, happily of rare occurrence, this Sibbendy is quite inadequate, and to meet such emergencies a large addition would be requisite, 2 or 3 peons among 1,000 men so keen as they are, would be disregarded, and on the occasion of the wreck of the *Byramgore* the Sibbendy themselves were robbers to a large amount. The only hope is to engage the body of the Islanders in the work of the salvage, and for example's sake to deal with them according to the strictest letter of the law in case of a recurrence of these barbarous practices. The former I have attempted to do by pointing out to them and fully explaining the nature of salvage transactions, and have fully warned them of the severity of the English law in such cases, but with what success remains to be seen; of this I am convinced, from what I experienced that under the similar circumstances, a small extra Sibbendy would be of little or no value. At present I think that no extra establishment is necessary, and that the Moktessers or head men should be made more use of.

Head Inhabitants.

In these small islands there are no Potails or heads of villages, but their places are supplied in each of the islands by the body of Karomars, the hereditary heads of families that formerly paid nazzers regularly for their local honors and privileges to the house of Cannanore. Many of their privileges have fallen into disuse, but that of sitting at *koots** is one still jealously guarded. In Ameendevy these are 21 in number and divided into 2 classes, in the first are the heads of the 4 principal families of Paudámbelly, Porácat, Porart and Beamady, the 17 others, sit at the *koots* and decide the petty disputes of the island, but have not so much influence. The Karomars of Ameendevy have considerable influence in the other islands but they too have their Karomars though less numerous. These with the permission of the Monegars or peons assemble *koots* for the various purposes of internal economy of the islands, as when thefts of fruits are very frequent, to inquire into them and discover the thieves, who before the *koots* will generally confess. At certain periods they assemble to settle a day or week for killing rats, or the cocoanut beetle which are so destructive to the trees in all the islands

* Assemblies.

except Kiltan. To them is referred every case of the nature of a civil dispute, and though not always impartial, and generally dilatory in their work, they are a valuable body of judges where custom and hearsay rule almost every question ; for until very lately the use of documents was unknown in these islands. As much business as is possible of this nature should be referred to them for decision, and will be decided more to the satisfaction of the parties generally than could be done by officers holding local civil jurisdiction. Hitherto the Collector has taken cognizance of all cases in which rights were concerned, and referred them to their Karomars for decision. As long as this body exist to appoint Moonsiffs or any civil authority would be to entail expense, if nothing worse. It has been the custom of these assemblies or *koots* as they are called to impose small fines paid in coir to Government on members who absent themselves without sufficient cause, as well as on those who do not appear before them when called, and this excellent custom has always been recognized by the Magistrate, and such fines confirmed.

The Karomars stand bail for all persons charged with crime, for which it will be necessary to bring them to the coast, and undertake to deliver them before the Magistrate ; and in cases of fines, some one of them undertakes to levy the amount of coir and deliver it on the coast according to the Monegar's list. No coir is ever collected by the police. To these Karomars with the Karony is left the whole coir management, and it may be said that the generality of the Islanders are the dependants of some one or other of them. By immemorial custom they are required to furnish boats and rowers gratis, to take the Monegar the tour of the island once in the beginning of every season, to make inquiries into what has happened during the monsoon and examine any cases that may have accumulated.

The state of crime in these islands for the last 8 years is shown by the marginal statement to be on the whole increasing, but I attribute this to greater vigilance in bringing offenders forward. The most frequent crimes are petty assaults and theft of nuts from the trees, but there is from time to time a case of stealing from houses and slight house-breaking. Great difficulty is experienced in making out a case which

Year.	Total punished.	No. of persons confined in stocks, &c.	No. fined.	Amount of coir.		
				Cands.	Mds.	lbs.
1837..	79	7	72	0	16	0
1838..	76	7	69	0	19	17½
1839..	34	0	34	0	8	17½
1840..	167	29	138	2	17	7
1841..	165	45	120	2	8	21
1842..	105	19	86	2	11	7
1843..	118	31	87	2	11	0
1844..	93	18	75	1	13	0

Islanders see will require to go before the Court, from the fear of being obliged to attend as witnesses. This is especially the case when the witnesses are chiefly females, for they will not leave the islands, the matter is therefore immediately compromised and justice frequently defeated. The Monegar has no proper place of confinement, and the punishment of imprisonment for theft is quite a farce and ineffectual; the principal inhabitants generally recommend flogging. For petty assaults fines are levied in coir at 1 rupee per maund. The price actually paid by Government is only about 11 annas per maund, the commutation rate then is greatly in favor of the fined, but even this calculation will not measure its value to a man who has the raw material about him, and has merely to direct the woman of his house to make up a little more coir. The fines are never paid at once, for the Monegar has no room to keep coir, and its weight always varies, but are undertaken by one of the Karomars so that all things considered the commutation rate should at least be doubled.

The Monegar makes the tour of the islands only once a year generally though situated near each other. This is not sufficient for effectual supervision, and he should be authorized to engage a boat for that purpose at least once a month, while communication is open.

Coir monopoly on the Coast.

The management of the coir in the Government monopoly, and the sources whence we look for a small revenue alone remain to be described. The months of January and February are very busy ones on the islands, the accumulations of coir for the season are gathered and made up into yarns of 70 to 75 fathoms long and brought by each family to the boat owner whom they are bound to employ; he receives their coir by weight but without reference to the quality and undertakes to pay to each on his return, their due proportion of the price received from Government for the boat load, and this too is done without reference to the classification on the coast. The coir is then unrolled, and packed tightly into boats which will carry from 40 to 60 candies. The boats are generally so top heavy from the article being bulky that should they meet squalls, they are obliged to throw a large quantity overboard; the loss of coir in this way is frequently very considerable. In March and April, the coir is brought to the coast. It is dried for 8 days, weighed and delivered into the godowns by the Islanders, and no expense is incurred. No separation of the coir into different classes or particular examination into its quality takes place at the time of receiving the coir, it is only on payment of the prices that any classification is

Classification of Coir.

made, and since 1837, the quantities to be received in each class have been fixed at a certain rate per cent. according to the general character of the coir supplied from each of the islands. Of Ameendevy and Kadamat coir—(for imported together they are received indiscriminately, though the latter is of the best quality,) 70 per cent. is paid for, as 1st class coir at 21 rupees 14 annas per Mangalore candy of 560 lbs. (equal to 25 rupees per Calicut candy of 640 lbs.) 20 per cent. is paid for as 2nd class at the rate of 17 rupees 8 annas per Mangalore candy, (or 20 rupees per Calicut candy) and 10 per cent. is entered as 3rd class coir and paid for at the rate of 13 rupees 4 annas 6 pie per Mangalore candy (equal to 15 rupees per Calicut candy) this will give the average price paid for a Mangalore candy of Ameendevy coir 20 rupees and 2 annas (or 23 rupees per Calicut candy of 640 lbs). Kiltan and Chetlat coir is finer and whiter and is received on a somewhat better footing. Of this 80 per cent. is paid for as 1st class, 15 per cent. as 2nd class, and 5 per cent. only is taken as 3rd class, at which rate the value of a Mangalore candy is 20 rupees 12 annas 7 pie, or 23 rupees 12 annas per Calicut candy and the difference between the prices paid for Ameendevy coir and Kiltan and Chetlat coir amounts to about 2-3rds per cent. In some of the Ameendevy reports I find the average price paid for coir stated as 17 rupees 8 annas per candy, which, from the above, is shown to be erroneous. Probably 2-3rds of the coir being entered as Ameendevy coir, is paid for at the lower average rate, but even then the average rate would be 20 rupees 5 annas 6 pie per Mangalore candy, or 23 rupees 4 annas per Calicut candy.

Until the year 1820, all coir was paid for at the rate of 21 rupees 14 annas per Mangalore candy, or 25 rupees per Calicut candy of 640 lbs. It appears from the records, that in that year the Head English writer reduced the price of some considered inferior to 17 rupees 8 annas per Mangalore candy, an arrangement which was confirmed by Principal Collector Harris, under date the 8th April, 1820. The native servants soon introduced a 3rd class, and made still further reduction, and the classification of the coir became a cause of yearly complaint on the part of the Islanders against the partiality and injustice of the public servants, who, they alleged, were inexperienced and unfit to judge the qualities of the coir. Mr. Lewin referred the matter in 1837 to a punchayet of experienced merchants, who decided that

90 per cent. of Chetlat and Kiltan coir should be paid for as 1st class coir, and 10 per cent. should be received as 2nd class coir, but that none of the coir supplied from these two islands was so inferior as to justify its being placed in a 3rd class, they recommended that 75 per cent. of Ameendevy and Kadamat coir should be paid for as 1st class, 19 per cent. as 2nd class, and 6 per cent. as 3rd class. From a comparative statement of the classification made by the servants during the five preceding years it appeared that, on an average 66 per cent. only, of Ameendevy and Kadamat coir had been paid for as 1st class, 22½ per cent. as 2nd, and 11½ per cent. as 3rd class, that of Chetlat coir 77½ per cent. had been taken in the 1st class, 15 per cent. as the 2nd, and 7½ per cent. as the 3rd, while the average classification of Kiltan coir had been 75 per cent. as the 1st class, 15½ per cent. as the 2nd, and 9½ per cent. as the 3rd. It appeared from this that the classification by the native servants had been to the disadvantage of the Islanders, but the recommendation of the merchants was considered too favorable. The Islanders and Karany were then examined, and after some discussion the rates were fixed as they now stand. By this arrangement an end was put to the constant, and in part just, complaints of the Islanders and to a great deal of trouble and loss of time in classifying the coir, a classification of which no notice was taken in selling it. The Islanders were fully warned that if advantage were taken of the arrangement, and coir found to deteriorate, it would be given up. I do not think that this had had the effect that was feared; the most material differences in the quality of coir arise from causes over which the Islanders have no control, and they manifest a most wholesome dread of the old state of things being reverted to.

Prices.

Up to fusly 1235* the Bombay and Bengal Government took almost the whole of the coir brought from these islands, and credited this Collectorate with 65 rupees per candy. The price has since fallen very much, the Bengal Government now seldom require more than ½ or ⅔ds. of what we have, and the rest, which is in general of a 2nd rate quality after selecting for the Bengal Government, is sold here by public auction. A marginal statement shows the

Fuslies.	Quantity of Coir.			Rate per candy.			Value.		
	Candies	m	lb	R	A	P.	Rs.	A	P.
1247........	739	0	0	20	0	0	14,780	0	0
1248.	90	18	14	20	0	0	1,818	8	0
	200	13	17	25	0	0	5,017	0	2
	291	12	3	0	0	0	6,835	8	2
1249........	401	5	9	25	0	0	10,031	10	5
1250........	393	16	0	25	0	0	9,845	0	0
1251........	253	8	11	25	0	0	6,335	7	10
1252........	275	0	15	25	0	0	14,133	4	10
1253........	565	6	18	25	0	0	14,133	4	10
1254........	265	9	24	25	0	0	6,637	5	2

* A. D. 1825-26.

amount sent to Bengal yearly since 1247, and the amount credited per candy at the bazar rate in Mangalore. The prices realized have fluctuated greatly during the last 20 years; they have been frequently below the price paid to the Islanders, and at best, have never yielded about 12 to 20 per cent. profit.

Sources of Surplus revenue.

During the first five fuslies of the British rule in Canara, the islands were rented to Packy Beary by whom probably very large profits were made. In 1804 their management was assumed by the Government, and from that year till fusly 1226 a considerable surplus revenue was derived from these islands, principally from the difference between the purchase and sale prices of the article. The average surplus profits of the monopoly for 5 years from 1814 to 1818 was rupees 23,424 per annum, and of 5 years from 1819 to 1823 both years inclusive was rupees 25,105 per annum. The value of coir having fallen, the Bengal Government declined crediting the district with more than the Mangalore market price for the article supplied to them, and the average price realized by the sale of coir since 1237 has been rupees 21-8-8 per candy, but as the purchase price was about 20-5 per candy scarcely more than 5 per cent. was derived from the proper source of a monopoly revenue. Some excess of receipts over disbursements however has been maintained in the following manner. The price of coir paid to the Islanders has from time immemorial been paid $\frac{1}{4}$th in coir and $\frac{3}{4}$th in rice, at a fixed average rate of 84 rupees per *corge* of 42 *mooras*.

State of the Revenue of late years.

The accounts of 17 years since the important change in the prices obtained for coir, show that as far as concerns this district, there has been a balance of receipts over disbursements in 15 years averaging for the 15 years, rupees 3,741 annas 12 pice 9 per annum. In 1832 and 1833 there was a net deficiency as an offset against this balance I believe an allowance of 1,500 pagodas (5,250 rupees) enjoyed by the house of Cannanore as compensation since about 1,232 should be reckoned. Should such an allowance exist it is clear that during 12 years from 1237 to 1241 there was, with two exceptions, 1245 and 1247, an annual net deficiency in the revenues of the islands as compared with the charges. However since 1249 the prices realized have been steadier and better, during the 5 years 1249 to 1253 there has been an excess of receipts over disbursements, averaging annually rupees 7,857 annas 8 pice 4, and leaving, even if necessary to charge the whole allowance above alluded

against these islands, a net surplus revenue averaging about 2,600 rupees per annum.

Of the system generally. The unproductiveness of the coir monopoly, and the position of Government receiving as it does large quantities of raw produce, fortunately not of a very perishable nature, which frequently lies on its hands upwards of a year after the purchase money has been paid, and for which, were not a distant market provided, probably scarcely higher prices than those prescriptively fixed as payable to the producers would be obtained; these considerations, and the irregularity and uncertainty of the fund from which the present occasional surplus is obtained as shown in practice, seem to have suggested to the officers in charge of the district for several years back, the idea that some change of system might be advisable. The growth of coir on the coast has increased so much, that though the quality of Laccadivy coir will always enable it to command better prices than the coast grown article, the former prices will never again be obtained and even a still further fall may occur.

The following paras. are from Mr. Collector Cotton's Aumany Report of 1835, and the same sentiments seem to have been adopted by several Officers since.

Para. 31. "I see no reason why the Islanders should now be "assessed in so peculiar a manner, the inhabitants "should, I think, be allowed to trade in coir as well as any other "produce, and whatever revenue they may be considered liable to "pay for the protection they enjoy, should be levied on their land or "in export duties. I do not mean however to recommend the im"mediate adoption of any measure which may cause distress to the "Islanders."

Para. 32. "The present price of coir in the market of Manga"lore is about 18 rupees per candy, which is nearly the "average amount of the three sorts as they are paid for by Go"vernment, but the Islanders would not be able to find an immedi"ate market for the whole of their coir even at a lower price if "the Government discontinued to purchase it, and would no doubt "suffer considerable difficulty. The Government having enjoy"ed all the advantages of high prices for many years, cannot now "fairly call upon the Islanders to share in the loss of low prices, but "I think a better system of assessment may be substituted for the "coir monopoly when circumstances render a change equitable to "both parties."

The nature of the proposed change is not specified, but before these paras. were written, Mr. Collector Cotton was aware of the declared aversion of the Islanders to a change which would substitute an assessment for the present system of monopoly. The sentiments of the principal inhabitants were taken by a deposition from them in 1834, which was lost with the rest of the records in 1837, and I cannot now cite their special reasons, but from conversation which I had with them, there can be no doubt that they still prefer the present system. Their reasons are probably a general dislike to a change in an immemorial practice. For good or for evil, so radical a change as must take place, if the present monopoly is abandoned, cannot fail to excite at first sight dissatisfaction amongst the conservative spirits of a small and exclusive native community, throughout which the influence of such a change must be extensively felt. The weightiest objection, however, on their minds is no doubt the fear of a heavy direct land assessment with its official interference and its calculations and rules unbending to individual circumstances, in exchange for their present light contribution to the public revenue; for it must be borne in mind that the coir produce of a tree is not more than one-third of the gross produce, and if under the circumstances above detailed 45 per cent. of the market value of this coir falls to Government, it is less than one-sixth of the gross produce. This contribution is paid in the most indirect way by the sale of surplus produce, and payment in food, and so that Government participates fully in any loss from deficiency of crops or even from the idleness of the Islanders in manufacturing the coir, while it bears exclusively any loss from enhanced prices of rice.

Another objection would be the difficulty of paying a money assessment—the total absence of money rents would indicate that the Islanders are not ready to pay a money assessment. The ready and steady market for their surplus produce which the present system affords is certainly in some measure a boon, and as a reason for maintaining the system, the Islanders press especially the difficulties and disadvantages to which they must be exposed in the market, that they would be obliged to find a market for 5 or 6 hundred candies of coir within a few months, that they would have scarcely time to watch the market, and being obliged to return to the group, where they are shut up for so many months they would find difficulty in recovering their debts. Possibly too much weight is given to these considerations, urged by the Islanders with a different view, and

adopted without full consideration. The whole length of the coast, (their boats sometimes go as far as Bombay,) with many good marts, would not feel the supply of a few hundred candies of good coir materially, and occurring as it would periodically would soon correct itself. The latter considerations are important but Moplas are skilful traders and the Islanders find no difficulty in getting a market for their surplus nuts. Take the market price of the raw coir yarn at 24 or 25 rupees per candy, and set all these disadvantages down as a deduction of 20 per cent., and the price which would be realized by the Islanders would be at least 40 per cent. above what they now actually receive for it in this shape from Government. But under the present system the Government requires the producer to give up the article in an almost raw state, there is no encouragement to enhance its value by the employment of skill or labour; in fact such is discouraged as the only object can be illicit traffic. Now the easy disposal of the raw article is probably a cause of congratulation among these lazy fishermen, but the native energy of the Mopla would engender industrious habits, and independence of character, were the monopoly thrown open and the people obliged to compete in the market.

Reduction of Prices.

The Islanders of course strenuously maintain that a change in the prices is a breach of *mamool** and 25 rupees per Calicut candy is guaranteed to them by prescription. In the introduction of classification with reference to the quality of the coir an infraction was made on this imaginary guarantee, and the Beeby of Cannanore has very materially modified her prices of late years. Reduction of these now would give rise to great discontent, and be but a temporary measure, further fall in prices would again require the application of the same remedy. It would tend to reproduce the objections, on the score of the moral effect on the people, to monopolies. The body of the people certainly are impressed with the idea of the fixity of the present rates. Twenty-five rupees per Calicut candy was paid by former Governments, and has been the basis of the rates paid by us for nearly half a century during the greater part of which period we have been gainers.

MANGALORE,
16*th July*, 1846.

* Prescriptive usage.

Appendix A.—*General Statement showing the quantity of Coir received, the amount of Receipts and Disbursements, and the Surplus revenue derived from the Laccadive Islands since coming under the Honorable Company's rule.*

Fuslies.	Total Amount of Coir.				Receipts. Amount realized on the sales of Coir.			Receipts. Average price per Candy.			Disbursements. Amount paid to the Islanders in Rice and Coin.			Disbursements. Miscellaneous expenses Sibbendy, &c			Disbursements. Total.			Net Profits of the Monopoly.			Deficiency.			Remarks.
1	2				3			4			5			6			7			8			9			10
	Cds.	Mds.	lb	R.wt	Rups.	A	P.	Rups.	A	P.	Rups.	A	P.	Rups.	A	P.	Rups.	A	P.	Rups.	A	P.	Rs.	A	P.	
1209....	0	0	0	0	6,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,800	0	0	0	0	0	
1210....	0	0	0	0	7,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,200	0	0	0	0	0	
1211....	0	0	0	0	9,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,100	0	0	0	0	0	
1212....	0	0	0	0	9,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,500	0	0	0	0	0	
1213....	0	0	0	0	9,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,500	0	0	0	0	0	
Total..	0	0	0	0	42,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42,100	0	0	0	0	0	
Average of 5 years	0	0	0	0	8,420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,420	0	0	0	0	0	
1214....	313	0	17	30	18,375	4	9	58	10	8	6,846	9	7	289	0	0	7,135	9	7	11,239	11	2	0	0	0	
1215....	395	15	13	0	21,767	8	5	55	0	0	7,059	2	8	354	12	10	7,813	15	6	13,953	8	11	0	0	0	
1216....	399	8	16	0	25,962	13	8	65	0	0	7,314	4	2	296	0	0	7,610	4	2	18,352	9	6	0	0	0	
1217....	400	12	19	0	26,041	3	3	65	0	1	6,848	10	8	291	1	0	7,139	11	8	18,901	7	7	0	0	0	
1218....	367	7	26	0	22,734	9	0	64	9	7	6,377	12	4	644	8	1	2,022	4	5	15,712	4	7	0	0	0	
Total..	1,876	5	7	30	1,14,881	7	1	308	4	4	34,446	7	5	1,875	5	11	36,721	13	4	78,159	9	9	0	0	0	
Average of 5 years.	375	5	1	22	22,976	4	7	61	10	5	6,889	4	8	375	1	2	7,344	5	10	15,631	14	9	0	0	0	
1219....	338	14	27	0	19,933	1	10	59	7	5	5,903	15	11	799	7	9	6,703	7	8	13,229	10	2	0	0	0	
1220....	421	13	20	0	26,753	14	0	63	7	1	7,853	15	5	677	15	3	8,531	14	8	18,221	15	4	0	0	0	
1221....	463	18	17	0	29,444	3	9	63	7	1	8,507	9	9	439	13	6	8,947	7	3	20,496	12	6	0	0	0	
1222....	400	10	3	0	25,807	6	3	64	6	11	9,665	6	5	299	5	3	9,964	11	8	15,842	10	7	0	0	0	
1223....	419	18	0	0	27,293	8	0	65	0	0	7,290	4	8	378	0	0	7,668	4	8	19,625	3	4	0	0	0	
Total..	2,044	15	11	0	1,29,232	1	10	315	12	6	39,221	4	2	2,594	9	9	41,815	13	11	87,416	3	11	0	0	0	
Average of 5 years.	408	19	2	8	25,846	6	9	63	2	6	7,844	4	0	518	14	9	8,368	2	9	17,483	3	11	0	0	0	

Fuslies.	Total Amount of Coir.				Receipts. Amount realized on the sales of Coir.			Receipts. Average price per Candy.			Disbursements. Amount paid to the Islanders in Rice and Coin.			Disbursements. Miscellaneous expenses Sibbendy, &c.			Disbursements. Total.			Net Profits of the Monopoly.			Deficiency.			Remarks.
1	2				3			4			5			6			7			8			9			10
	Cds.	Mds.	lb	R.wt.	Rups	A	P.	Rups.	A	P.	Rups.	A	P.	Rups.	A	P.	Rups.	A	P.	Rups.	A	P.	Rs.	A	P.	
1224....	508	9	15	0	33,050	12	1	65	0	0	7,450	13	7	373	10	10	7,824	8	5	25,226	3	8	0	0	0	
1225....	403	12	8	0	26,169	4	10	64	15	11	5,146	9	4	369	6	11	5,516	0	3	20,653	4	7	0	0	0	
1226....	475	7	17	0	30,899	11	7	66	0	0	7,617	13	0	373	6	10	8,021	3	10	22,878	7	9	0	0	0	
1227....	533	11	22	0	34,693	0	10	65	0	0	8,804	3	0	371	2	4	9,178	5	4	25,514	11	6	0	0	0	
1228....	483	10	11	0	31,623	12	5	65	2	0	8,396	3	10	376	10	3	8,773	1	1	22,850	11	4	0	0	0	
Total..	2,403	14	17	0	1,56,436	9	9	326	1	11	37,415	10	9	1,867	5	2	39,313	2	11	1,17,123	6	10	0	0	0	
Average of 5 years	480	14	25	32	31,287	5	1	65	3	7	7,489	2	1	373	7	5	7,862	10	2	23,424	10	11	0	0	0	
1229....	477	7	19	0	31,029	15	2	65	0	0	8,462	5	9	377	1	7	8,839	7	4	22,190	7	10	0	0	0	
1230....	490	8	12	0	31,877	6	1	65	0	0	8,619	5	1	400	1	7	9,019	6	8	22,857	15	5	0	0	0	
1231....	616	12	4	0	42,029	7	6	65	0	0	8,664	0	0	375	7	2	9,059	7	2	32,990	0	4	0	0	0	
1232....	452	4	15	0	29,391	11	10	65	0	0	5,919	9	10	393	11	2	6,343	5	0	23,051	6	10	0	0	0	
1233....	537	8	18	0	33,633	1	6	65	0	0	8,221	12	9	976	6	3	9,198	3	0	24,434	14	6	0	0	0	
Total..	2,581	1	12	0	1,67,961	10	1	325	0	0	39,917	1	5	2,522	11	9	42,439	13	2	1,25,521	12	11	0	0	0	
Average of 5 years	516	16	8	0	33,592	14	9	65	0	0	7,983	6	8	501	8	9	8,487	15	5	25,101	15	4	0	0	0	
1234....	529	0	17	0	34,386	15	6	65	0	0	8,996	6	0	653	5	10	9,649	11	10	24,737	3	8	0	0	0	
1235....	524	6	26	0	34,082	8	6	65	0	0	9,035	4	0	593	1	0	9,628	5	0	24,454	3	6	0	0	0	
1236....	497	14	14	0	25,926	15	8	52	1	5	8,390	3	9	860	9	6	9,250	13	3	16,676	2	5	0	0	0	
1237....	527	9	15	0	12,501	1	10	23	11	2	8,068	10	10	1,028	3	3	9,096	14	1	3,401	3	9	0	0	0	
1238....	454	13	2	0	8,929	0	0	19	10	2	5,953	15	1	797	5	2	6,751	4	3	2,177	11	9	0	0	0	
Total..	2,533	4	18	0	1,15,826	9	6	225	7	10	40,14	7	8	3,932	8	9	44,577	0	5	71,449	9	1	0	0	0	
Average of 5 years	506	12	26	0	23,165	5	1	45	1	6	8,088	14	4	786	8	1	8,875	6	5	14,289	14	7	0	0	0	

Fuslies.	Total Amount of Coir.				Receipts. Amount realized on the sales of Coir.			Receipts. Average price per Candy.			Disbursements. Amount paid to the Islanders in Rice and Coin.			Disbursements. Miscellaneous expense Sibbendy,&c			Disbursements. Total.			Net profits of the Monopoly.			Deficiency.			Remarks.
1	2				3			4			5			6			7			8			9			10
	Cds.	Mds.	lb	R.wt	Rups.	A	P.	Rups.	A	P.	Rups.	A	P.	Rups.	A	P.	Rups.	A	P.	Rups.	A	P.	Rs.	A	P.	
1239....	379	1	7	0	7,410	3	1	19	10	10	4,096	1	3	518	12	9	4,641	14	0	2,795	5	1	0	0	0	
1240....	498	10	12	0	9,982	3	1	20	6	3	6,173	4	1	356	9	6	6,529	9	7	3,452	10	4	0	0	0	
1241....	568	13	5	0	11,011	7	6	19	5	9	7,680	13	3	735	9	6	8,416	2	6	2,595	5	9	0	0	0	
1242....	584	1	20	0	8,661	8	8	14	13	1	8,306	12	3	1,231	10	10	9,538	7	1	0	0	0	876	14	5	
1243....	593	5	14	0	8,492	14	2	14	5	0	8,127	7	8	567	5	8	8,694	13	4	0	0	0	201	15	2	
Total..	2,623	12	2	0	45,588	5	4	88	8	1	34,381	2	6	3,440	0	3	37,823	14	6	8,843	5	2	1,078	13	7	
Average of 5 years	524	14	11	24	9,117	10	8	17	13	2	6,876	13	3	688	0	0	7,564	12	6	1,768	10	7	215	12	3	
1244....	517	16	14	0	19,683	0	0	18	11	2	6,401	9	10	615	9	4	7,020	3	2	12,662	12	10	0	0	0	
1245....	585	1	11	0	11,353	1	11	19	3	0	7,575	4	8	586	9	10	8,161	14	6	3,191	3	5	0	0	0	
1246....	567	6	3	0	11,538	9	2	20	4	10	7,171	14	8	840	2	5	8,012	1	1	3,526	8	1	0	0	0	
1247....	1,138	12	21	0	27,642	1	10	23	11	9	9,897	2	6	642	2	10	10,539	5	4	17,102	12	6	0	0	0	
1248....	631	5	21	20	15,350	4	2	21	5	0	10,227	15	2	638	2	2	10,866	1	4	4,484	2	10	0	0	0	
Total..	3,440	2	14	20	85,567	1	1	106	4	0	41,276	14	10	3,322	10	7	44,599	9	5	40,967	7	8	0	0	0	
Average of 5 years	68	0	14	4	17,113	6	7	21	4	0	8,255	6	2	664	8	6	8,919	14	8	8,193	7	11	0	0	0	
1249....	632	3	2	0	15,728	10	5	21	12	0	9,497	8	2	590	12	10	10,088	5	0	5,640	5	5	0	0	0	
1250....	664	3	18	20	16,463	5	3	21	15	10	7,287	5	10	599	13	7	7,882	3	5	8,581	1	10	0	0	0	
1251....	649	17	27	0	16,245	5	5	24	15	11	8,071	2	1	567	12	6	8,638	14	7	7,606	6	10	0	0	0	
1252....	704	4	7	20	17,593	5	4	24	15	7	7,049	12	6	577	9	11	7,627	6	5	9,965	14	11	0	0	0	
1253....	622	15	4	0	15,580	4	10	25	0	2	7,533	0	3	553	7	7	8,086	7	10	7,493	13	0	0	0	0	
Total..	3,273	3	29	0	81,610	15	3	124	11	8	39,438	12	10	2,889	8	5	42,323	5	3	39,287	10	0	0	0	0	
Average of 5 years	654	12	22	21	16,322	3	0	24	15	1	7,887	12	2	577	14	5	8,464	10	7	7,857	8	4	0	0	0	

B.—*Abstract Statement showing the Native returns of Population, &c., of the Luccadive Islands.*

		Population.			Cocoa Plantation.													Boats.		
		Male.	Female.	Total.	Total Trees.	Chouk or Unproductive.	Young Trees and Plants.	Total Productive.	Houses.	Mosques.	Soopary Trees.	Bread Fruit Trees.		Undel Trees.	Lime Trees.	Cattle.	Plantain Gardens.	Large.	Small.	Donies.
Ameendevy..	For 1827....	No	retur	ns.	67,534	2,745	20,716	44,073	198	0	0	0	0	0	0	0	0	0	0	0
	,, 1831....	944	994	1,938	71,616	1,589	23,358	46,669	296	31	389	438	0	0	0	0	0	0	0	0
	,, 1839....	1,081	1,161	2,242	64,943	7,660	20,942	36,341	345	38	440	834	0	29	100	134	371	17	14	77
	,, 1844....	1,142	1,173	2,315	64,172	4,052	15,891	44,229	343	38	322	853	0	17	101	167	365	18	18	97
Kadamat.....	,, 1827....	No	retur	ns.	2,936	66	1,126	1,744	10	0	0	0	0	0	0	0	0	0	0	0
	,, 1831....	38	38	76	4,699	237	2,731	1,731	15	2	0	1	0	0	0	0	0	0	0	0
	,, 1839....	60	54	114	2,401	138	915	1,348	22	2	0	4	0	4	1	17	0	0	2	10
	,, 1844....	71	62	133	3,319	153	804	2,362	22	2	0	8	0	3	1	26	0	0	2	9
Keltan.......	,, 1827....	No	retur	ns.	29,975	2,102	19,851	8,022	62	0	0	0	0	0	0	0	0	0	0	0
	,, 1831....	224	241	465	34,428	1,207	23,433	9,788	92	6	0	0	0	0	0	0	0	0	0	0
	,, 1839....	263	268	531	27,100	3,630	11,823	11,647	140	13	0	17	0	2	21	86	0	8	12	59
	,, 1844....	316	323	639	29,297	2,525	11,855	14,917	151	11	0	21	0	3	23	88	0	12	11	73
Chetlat.......	,, 1827....	No	retur	ns.	21,336	483	14,465	6,388	45	0	0	0	0	0	0	0	0	0	0	0
	,, 1831....	140	213	353	24,899	541	4,246	20,112	75	4	0	1	0	0	0	0	0	0	0	0
	,, 1839....	234	237	471	27,501	1,695	18,523	7,283	112	7	9	17	0	22	26	52	0	8	20	66
	,, 1844....	263	259	522	25,665	1,399	16,520	7,746	114	8	6	24	0	18	22	52	0	8	19	70
Total of 4 Islands for 1844..		1,792	1,817	3,609	122453	8,129	45,070	69,254	630	59	328	906	0	41	147	333	365	38	50	249

II.—*Visit to Mount Sinai to which is prefixed a brief Geological Sketch of the Peninsula of Sinai. By* Captain NEWBOLD.

The Peninsula of Sinai is a triangular tongue of land between the Gulfs of Suez and Akaba comprehended between the latitudes of 30° and 27° 40′ N. and longitude 30½ and 35° E. A line drawn from the head of one gulf to the other forms the base of the triangle about 107 miles broad from E. to W. which terminates to the south in the apex of Ras Mahomed, where the two gulfs unite in the common channel of the Red Sea. The average length of the peninsula from N. to S. is about 108 miles.

The elevated plateau of Et Tih occupies the northern parts of this tract, and the mountainous central region of Mount Sinai may be considered as reaching from the southern base to the vicinity of Ras Mahomed, which is a low ridge of rock not deserving of the name of a promontory.

On the eastern side the mountains almost fringe the gulf of Akaba, but on the western flank a maritime plain extends between the base of the central mountainous region and the Red Sea, here and there interrupted by mountain-spurs, as at Jebel Pharoun and Ras Jehan, coming down to the sea. The longitudinal and the transverse vallies by which the southerly or mountainous region is strangely fissured, form the natural routes and lines of drainage—the *wadis* of the Arabs.

Geological Features.

The plateau of Et Tih literally, meandering, is a dreary desert, elevated, flat, often covered with drifted sands, beds and mounds of gravel, of quartz, flint, calcareous and jaspideous pebbles resting on a tertiary limestone, which stretches across the isthmus of Suez into Egypt on the one side, and to the ranges of Libanus on the other, sinking northerly towards the sandy maritime tracts skirting the Mediterranean. It has received its name of Et Tih from its level and almost trackless extent.

This limestone is often of a chalky texture and colour. Where it is so, it generally contains imbedded nodules of flint, which are often black, in regular and almost horizontal layers, conforming to the stratification. In other localities it is usually of a cream or buff colour, and close in texture. Among its numerous fossils I found

ostreœ, echini, madripores, pecteus. Rock-salt and Gypsum occur in layers.

The limestone beds of Jebel Pharoun, Jebel Hummam and other ranges on the eastern coast, appear to be spurs and outliers from Et Tih.

The central region around Mount Sinai presents a magnificent outburst of granitic and porphyritic rocks which have uplifted and thrown into confusion a zone of hypogene rocks, principally hornblendeschist and gneiss, all penetrated by great dykes of basaltic greenstone, which present a singular feature in this extraordinary tract, passing through and over high bare mountains of red granite, in dykes and walls, and adding much by their black rugged exterior to the desolation which prevails.

The greatest elevation which the granite attains is within a short radius from Mount Sinai—itself a granite mass 7,412 feet above the sea. Mount Catherine 2 miles to the S. W. is 8,063 French feet; Jebel Serbal 6,342 French feet; Om Shomar, about 7 miles S. by W. from Mount Sinai, is however said to be the highest peak in the Peninsula.

The heights of the southern prolongation of the central region towards Ras Mahomed, put down in the maps under the general term of Jebel Et Turfa, have not been ascertained. The nearest approach of the granite to the western coast is near its N. W. angle in about 29° 4′ at Wadi Dhafery. At Tor it is about 5 miles distant. It spreads out, breaking up the hornblendeschist, to the eastern coast, where it forms a range from 800 feet to 2,000 feet above the sea. Emerging on the north in about latitude 29° from the sandy plain of Debbater Ramleh at the base of the plateau of Et Tih it disappears to the S. under the tertiary fossiliferous limestone of Ras Mahomed.

Sandstone formation.

A broken frame-work of sandstone is seen resting on the borders of the granitic and hypogene areas, and sometimes entangled in them, the limits of which it is difficult to define. On the north it appears to be bounded by the limestone of Et Tih and is seen near the coast of the Red Sea in the vicinity of Ras Zulima, a little south of the limestone of Jebel Pharoun, and forms the ranges of Jebel Mookattil, En Nasb, Serabut, al Kadim, and the mountain of the Bell, "*En Nakús*" S. of which it disappears under the tertiary limestone of Jebel Hummam and El Kaa near Tor.

I am not aware that it has been seen south of this on either side of the Peninsula, but it will probably be found lower on its eastern flank. At Jebel Nakús it appears insulated from the granite and hypogene schists, amidst a formation of tertiary limestone, I could discover no traces of the former rocks *in sitû* in this locality, though the probability is they are at no great distance below its base.

Near the eastern coast it caps the hornblende rock at Ograt el Faras and hence to Wadi Murrah and El Ghor. It caps the granite of Jebel Sumghy, Es Sadeh and northerly it is seen occasionally resting on the granitic rocks, as at Muzirk and Ras el Musry to the head of the Akaba gulf.

In lithologic character it varies from a compact reddish quartz rock as at the western mountain near Tor to a whitish grit as at En Nakûs and to variegated sandstones as at Wadi Murrah.

The extensive sandy tracts and dunes in the interior which usually mark the vicinity of this formation, are the result of the weathering of the less consolidated beds of this rock and which possibly in some cases never have been consolidated. This remark is however not intended to apply to the drifts of fine blown sand which are so remarkable on the sides of the ranges which skirt the Red Sea; and which have evidently been blown up from the sandy shore.

More recent deposits.

The low maritime plains are usually covered with sand and sometimes with a gravel which as on the plain of El Kaa has been transported a considerable distance from the granitic rocks in the interior. This gravel it is easy to account for in the beds of the *Wadis* by the action of the mountain torrents, which come down occasionally with great violence during the rains; but a considerable portion of it is now far remote from their present action. It is however in greatest abundance near the mouths of the *Wadis* which have in many cases cut their channels through beds of it of considerable thickness, and which on the eastern coast, as Professor Robinson informs us, reach from the base of the mountains to the sea, sometimes in beds feet thick.

I examined the beds at the mouth of Wadi Hebron where it opens into the plain of El Kaa, under the impression that they might be ancient moraines but found the pebbles of moderate size and smaller, regularly interstratified with layers of sand, and no signs of glacial action on the rocks. The rapid melting of the snows which are

known to cap the peaks of Sinai during the winter months, no doubt adds to the force of these *Wadi* torrents.

It appears to me that much of this gravel which cannot be accounted for by existing causes of transport, was accumulated during oscillations of the surface of the land.

Underneath the surface of the sand, especially near the head of the gulf of Suez and in many places rising in small hillocks above it, we see thin beds of a grey and greenish clay, sand and marl, often laminated, imbedding layers of lamellar crystallized gypsum and muriate of soda or rock-salt and sometimes existing pelagic shells, also little mounds abounding in little worn fragments of Egyptian pebble, jaspers, and hard calcareous stones, light coloured interiorly; but of a dark brown exterior, evidently stained with oxide of iron, which has a tendency to blacken when in contact with calcareous matter. This dark appearance is so remarkable that Niebuhr and others after him, thought the stones had been blackened by the sun. The water of the wells rising in these saliferous beds is usually brackish as might be expected. Raised beaches of recent coral a few feet high, occur at Tor and many other places on the Red Sea. According to Rüppell there is a raised coral beach, 13 feet above the sea level, at Ras Mahomed.

Volcanic Rocks.

Laborde and others have doubted the existence of volcanic rocks on the peninsula of Sinai, from not having observed them, and from Rüppell's arguing their absence from not finding titaniate of iron mingled with the sand brought down by its streams. Burckhardt distinctly states their occurrence to the south near Shurm, on the east coast north of Ras Mahomed, as black and red rocks, forming crater-like configurations. He also mentions basaltic tufa composing low hills between Wadis Ruman and Mukatteb. They are no doubt rare.

Ages of the Rocks of Sinai.

Regarding the supposed age of the different rock formations, Burckhardt and Professor Robinson, from whose valuable works a large share of the information contained in this sketch has been derived, say nothing and indeed tell us little, beyond the surface changes, from sandstone and limestone, to granite gneiss and grünstein as they travelled along, —observations however, extremely useful and to be prized.

As it is, nothing beyond the relative ages of the rocks, except the

tertiary limestone and more recent deposits just described, can be guessed at.

It is evident that the granite must be of more recent origin than the hypogene schists, the strata of which I observed in the vicinity of Mount Sinai to have undergone great disturbance thrown on their edges and altered by it. The porphyries are more recent than the granite which they penetrate, and the basaltic greenstone penetrates both the porphyries and the granite.

Next in order of superposition to the hypogene schists comes the sandstone which rests on them in slightly inclined and unconformable strata; it marks the era of a subsequent period of disturbance but less violent, and was deposited while the granite peaks either formed inequalities in the ocean's bed or appeared as small islet points just above its surface, with which it rose to the heights we now see it. The continuity of the sandstone strata apparently suffered from inundation.

The tertiary limestone from its usually undisturbed horizontal stratification appears to have been elevated slowly without any violent paroxysms of plutonic or volcanic energy like the more recent formations. Its fossils have not been yet scientifically described, but in general character they resemble those of the Egyptian tertiary limestones. The mineral character of the rock too, is much the same. A minute examination of these limestone strata may give groups of more than one epoch.

In the sandstone I could discover no fossils to afford any indication of its age.

From Burckhardt's account of the volcanic rocks near Shurm no clue to their relative age could be gained.

Metallic Ores and Minerals. The great scantiness of metallic ores and minerals not only in the peninsula of Mount Sinai but in Egypt and Arabia is a remarkable feature. Iron ore, the most useful of all, occurs in very small quantities though it is seen in a state of diffusion strongly colouring the sandstone rocks. I picked up a few nodules of a poor hematite, in the neighbourhood of Mount Sinai, but I am not aware that the Arabs ever reduce this or any other iron ore to a metallic state. Their weapons and few iron utensils being generally purchased at Suez, Cairo, or from native craft touching at Tor.

Mr. Leider showed me in his collection at Cairo, a specimen of

sulphuret of iron, said to come from Mount Sinai, the crystals of which have a curious resemblance to Cufic characters.

Copper.

Laborde[a] tells us that in an extensive bed of free-stone commencing in the plain of Et Tih and reaching as far as Nasb and Serabut al Kadim and S. towards Wadi Magara, traces of copper exist, and that there are the remains of ancient minesin Wadi Magara. Specimens of the turquoise (malachite ?) were brought him from the rubbish of Serabut al Kadim by his Arab Hussain.

If these were really in situ the probability is they were malachites as the true turquoise or calaite rarely if ever occurs in sandstone. Its geological situs in Persia is trap rock and its alluvium.

Antimony.

Professor Robinson states[b] that he saw no traces of mines around Serabut al Kadim, as mentioned by Laborde; but his Arabs informed him that towards the west in Wadi Suhan, a branch of Wadi en Nasb was found, the stone from which *el kuhal* is made and carried to Muskat. He supposed it to be antimony though he acknowledges he saw none of it.

Cinnabar.

According to Burckhardt[c] a few hours to the N. E. of Wadi Osh is the mountain of El Shugger, where native cinnabar is collected by the Arabs under the name of *rosokht* رسخت. It occurs, he describes, in small pieces about the size of a pigeon's egg, and very seldom crystallized; but there are sometimes nodules on the surface. It stains the fingers of a dark colour, and its fracture is in fibres. He did not hear that the Arabs traded in it. In Wadi Osh the rocks are of gneiss mixed with granite, but the exact matrix or geological situs of cinnabar, Burckhardt does not specify.

Tafal.

Beds of a yellowish clay occur in Wadi Shaikh which Burckhardt ascribes to the decay of the felspar in the granite. It is sold by the Arabs at Cairo, is used as a fuller's earth, and by the poorer classes instead of soap. It is called by them "*tafal.*"

Common Salt.

Rock salt is procurable very generally in the gypsiferous beds as mentioned above. I am not aware that the Arabs use the gypsum for any purpose. Rock crystal occurs in the granite rocks of Mount Sinai.

a Laborde's Sinai and Petra, English Ed. pp. 81 and 84.

b Researches, p. 116.

c Travels in Syria, &c., p. 487.

Visit to Mount Sinai.

Having despatched our boat and Arab crew to await our arrival at Tor, we sailed from Suez in the *Colombo.* Our worthy Commander, Captain McKellar, having kindly volunteered us a passage, an offer, of which we gladly availed ourselves. We weighed anchor on the 1st June at sunset after a tiresome detention at Suez, and reached Tor about noon the following day.

Here we found our boat and crew who did good service by assisting in getting up an anchor which the *Colombo* had left in a coral reef on a former voyage, when she had Sir Peregrine Maitland and family on board.

We took leave of the good ship at 3 P. M. and instantly commenced preparations for starting the same evening towards Mount Sinai.

It was with great difficulty we could get the phlegmatic old Greek Nicolai to bestir himself. He evidently thought pipes, coffee, a good pilau, and a night's rest, indispensable preliminaries to a trip into the stony *Wadis;* and it was with some difficulty and personal exertion that we succeeded in mustering three saddle donkeys, and a baggage camel with two Arab guides before sunset, for the sum of 180 piastres.

Our imposing caravan got under weigh about 7 the same evening and at the rate of 2½ miles an hour. The Arabs called a halt about midnight, the camels (for some others had joined us on route) went down on their knees, and the donkies, wide awake to the signal stood planted. We dismounted somewhat reluctantly as the night air was delightfully cool, and pleasant for travelling. The tiny cups of fragrant coffee were soon prepared by our Egyptian servant Ali, and in a few minutes we were stretched on the gravelly plain of El Kaa—fast asleep.

The town or rather village of Tor (or more properly speaking Tûr طور), comprises the flat roofed, half-mud, half-stone houses of a few Greek Christians and the huts of one or two Arab families. The Arab fort is, and was in Niebuhr's day, a ruin. It is situated on the shore near the mouth of a small bay, the entrance of which is intricate from coral reefs. Tor partly stands on a raised coral reef covered with sand.

Behind is a strip of low marshy ground dotted with dates and

palms ; beyond that the plain of El Kaa bounded to the east by the mountains of Sinai.

El Wadi and Jebel Hummam.

On leaving the walls of this dusty wretched town, we travelled on a N. by W. direction along the marshy and sandy flat to the palm and date shaded village of El Wadi which is a little more than a mile from Tor. Near El Wadi we crossed the *Wadi* itself which appears to be the dry broad channel of a monsoon torrent. After travelling 3 or 4 miles further on, we turned in an E. direction to our right over a low ridge apparently the southern prolongation of Jebel Hummam.

Jebel Hummam جبل حمّام derives its name from some tepid springs called the Baths of Moses "*Hummam Mússa*" (which I visited on another occasion,) close to the gardens of El Wadi. The rock there was fossileferous limestone with millepores.

By some travellers the wells in the *Wadi* and palms have been supposed to be the wells of Elim.

The principal objection that has been urged against this opinion is that if the Israelites crossed the Red Sea near its northern extremity in their road from Egypt to Mount Sinai and to the promised land; it is not likely they would have come so far south out of the direct route.

This can hardly be received as an objection when we reflect that the progress of the Israelites towards the promised land was not a direct one, after the passage of the Red Sea, but a series of wanderings in the wilderness decreed by the Almighty Himself for their chastisement. The direct road would certainly have been from the eastern shore of the Red Sea to Gaza but avoiding altogether Mount Sinai, Edom and Mount Hor where Aaron died, before the land flowing with milk and honey was permitted to be attained.

June 3d. We rose before dawn; the morning extremely cold; and pursued our route north-easterly, across El Kaa toward the pass of Wadi Hebron which debouches on El Kaa from the grand mountain mass of peaks before us.

The plain rises gently towards the base and nearer the mouth of Wadi Hebron is broken up by diverging beds of torrents. Here our Arabs called it Hulleh Hebron. It was a lovely sight to witness from the plain of El Kaa the rays of the rising sun gilding the lofty peaks of Mount Catherine, Jebel Sherban, Muara and Om Shomar.

The last two bore southerly of the other peaks. Mount Sinai was not visible hence.

The plain is covered with sand generally of a coarse quartzose nature, often strewn with a gravel composed of fragments of the granitic and hypogene rocks, both angular and rounded, from the size of a pea to that of an orange; the pebbles are principally of reddish granite, porphyritic and close-grained hornblende-schist, basaltic greenstone, compact felspar coloured green with actynolite—actynolite with quartz and felspar in drusy crystals, and porphyry of various descriptions including melaphyre. The most prevalent variety is like that of Egypt, being composed of a brownish felspathic paste imbedding felspar crystals of a light reddish brown, white and of a pink hue; also a black augitic paste imbedding crystals of red, white, or pale green felspar.

Wadi Hebron.

Wadi Hebron is a transverse fissure in the western ranges of the peninsula of Sinai, which here run S. by E. towards the apex, at Ras Mahomed. This pass is often from 300 to 400 yards broad, but sometimes contracts to 20. The course at the entrance is E. N. E. but afterwards winds about. Its sides are composed of bare rocks, often rising almost perpendicularly from 200 to 700 feet high. The rocks are of a granitoidal gneiss in nearly vertical strata penetrated by granites, dykes of basaltic greenstone, and porphyry.

Opposite the mouth of the pass, the torrent which during the rains issues from it down to El Wadi, has worn its way through deep beds of gravel which are seen to extend along the seaward base of the mountains to the right and left of the mouth of the pass.

They are piled up to the height of about 40 feet near the mountains and gradually slope into the general level of the plain.

These beds of gravel could not have been altogether accumulated by the present torrents of the *wadis* which however during the rains rush down with force enough to tear up trees, and cover a considerable space of ground with debris, but their utmost limit does not extend to those of these gravel beds, which appear to me to be more like the remains of an ancient coast-line in which the mouths of the *wadis* formed indentations or bays. I could not trace any decided glacial furrows on the sides of the rocks. In localities where furrows did exist they were always more or less conformable to the relative hardness or softness of the rock and its veins.

These beds often form a talus at the base of the mountains, usually nearly flat, or sloping gently towards the plain. Part of one of these beds opposite the mouth of the pass has remained an isolated mass, the sides have been swept away and resembles much an embrasured redoubt to guard the mouth. In the examination of their structure one finds the sand and gravel in regular layers very unlike the confused order of the materials composing a moraine. The pebbles are in general rounded and derived from the rocks in the vicinity similar to those described as lying loose on the surface of the plain of El Kaa.

The gravel bed and those resulting from the decay of the granite and hypogene rocks are often cemented and consolidated by the water of springs charged with carbonate of lime, assisted by the oxidation of a portion of the iron contained in the rock itself.

Beds of gravel are mentioned by Professor Robinson as occurring at the base of the mountains of the eastern coast of Sinai near the mouths of the *wadis* sloping from the basis of the ranges towards the sea, but he does not say whether stratified or not. Of the nature, size, or shape of pebbles imbedded we have no information.

Small clear springs still trickle through Wadi Hebron. The water had a temperature at noon, in the shade of 78·2° Faht.; air in shade 76·4°; on granite rock freely exposed to the rays of the sun, the mercury rose to 119° (noon).

About 8 A. M., we alighted under the shade of some cliffs overhanging a verdant spot in the *wadi* where the spring had collected into a small pool which afforded us a most refreshing bath. In the shallow parts of the rivulet grew a rush, which reminded us of the English rush, and which the Arabs call *súmar*, the broad-leaved *khubba* flag and the cotton-podded *shiat.* After splashing about in the water for some time we dressed and breakfasted under the shelter of some date bushes.

At 4 in the afternoon we again pushed on up the *wadi*, walled in on either side by most picturesque rocks and its surface often green with large tamerisk bushes, for 5 hours without interruption in a general N. E. direction. It was evident we had been ascending for the first 4 hours; and the last hour was spent in mounting a steep defile. On our left lay a deep precipitous ravine headed by a rocky barrier of considerable height which appeared to close the pass forming a *cul-de-sac;* and which from a cursory examination by

starlight struck me as being the head of the valley called Wadi Hebron and forming a water shed between Mount Sinai and the sea of Suez.

But I must not omit to mention a singular peak, which we passed at 6 P. M. apparently fully 900 feet above us with the figure of a large white cross on the precipitous side of the bare cliff forming its summit. If the appearance be not the work of man's hands, but the result of some vein in the rock it could not have escaped the attention of the early pilgrims to the sacred mount, and would be regarded by them as a rainbow of hope to comfort them on their journey through the wilderness.

The cold on the top of the rocky barrier was so great in comparison to the *khamsin* we had been grilling in at Suez that we could not sleep. The stars shone in the deep blue heaven with a brilliancy rarely surpassed even in India.

Well might the Chaldean shepherds while tending their flocks, during the still watches of the night turn star-gazers and note the revolutions of the heavenly bodies over so clear and beautiful a mirror.

4th June.—At half an hour before sun-rise we descended the rocky barrier into the head of another ravine called by the Arabs with us Wadi Feiran.

Wadi Feiran.

Our course now instead of being N. E. turned to E. S. E. and that of the little spring in Wadi Feiran has a similar direction, nearly opposite to the rivulet of Wadi Hebron. The descent easterly however is of short continuance and we soon lost the course of the rivulet which finds its way in one of the smaller *wadis* which open on Wadi Feiran to the S.

Wadi Feiran offers far less picturesque features to the traveller than Wadi Hebron. The rocks are principally of the hypogene schist, gneiss, mica, felspathic actynolite, chlorite and hornblende schist, (the latter prevailing), the contour of which is always less bold than that of the granite and porphyry with which they are associated.

The surface of the valley is free from rocks, and better clothed with vegetation—principally tamarisk trees. Hence is a fine view to the N. W. of five of the lofty granite peaks of Jebel Serbal rising high above his neighbours.

Wadi Hawa.

At $9\frac{1}{2}$ A. M. reached Wadi Hawa. Emerging from Feiran we confronted the high jagged ridge of Syed Músa through which lies the defile of Abu Tok or Nakb Hawa overlooked by Jebel Feiran.

The entrance to Wadi Hawa is narrow and steep ; and lies along the right or S. side of a ravine called Nakb Hawa. Part of the road has evidently been cut in the rock.

Hajjer Abu Tok.

On the top of this high pass, commanded on each side by naked granitic and porphyretic rocks, rising in a sloping surface from the edges of the ravine, we halted to breakfast, under shelter of some large detached masses of granite at $10\frac{1}{2}$ A. M.

These masses are covered often with basin shaped, and irregularly formed cavities apparently caused by watery erosion, many of which are confluent and impart a grotesque appearance to the surface on which may be often traced a rude resemblance to the human face, while the general contour of the mass, originally cuboidal, with its rounded off-angles assumes the outline of a skull.

This granitic Golgotha has evidently been formed by the spontaneous splitting and exfoliation of the adjacent granite rocks, and many of the masses thus detached have slid down from the summit as seen every day in the granite rocks of India. They are therefore not boulders in the geological acceptation of the term.

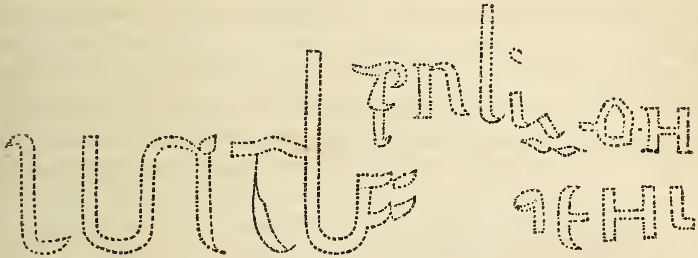
The erosions occur both on the tops and sides of some of the blocks which shows that they must have shifted position more than once while exposed to watery action. The lips and sides of the cavities are smooth apertures, and channels of communication from one to another have been made, precisely similar to those of the rock basins in the beds of Indian rivers.

Some of them contain pebbles. These at first might be taken for the gravel brought down by the stream which had contributed to hollowing out the cavities, but some Arabs, who brought us goats' milk, said the pebbles had been deposited there for good luck by Arab travellers.

Inscriptions.

On one of these masses about 20 feet high and 40 long are rudely engraven on its N. E. side, some of the celebrated Sinaitic characters which have so long puzzled travellers and the literati of Europe, and which have in great measure been lately deciphered by the indefatigable and learned Professor Beer of

Leipzig. As I do not see any copy of this particular inscription in Burckhardt, and not having Mr. Grey's collection of 177 to refer to, I have preserved the copy I took on the spot, another was taken by my fellow traveller Mr. Shute at the time, and both were compared and found exactly alike.



The letters are from 2 to 6 inches long, and are now faint and nearly obliterated. The stone is a coarse granite, of reddish felspar, quartz, mica, and hornblende, the upper surface of which is exfoliating in thin flakes.

There is little doubt that hundreds of these inscriptions have been lost, and are daily vanishing under this natural process of obliteration, and if the researches of Professor Beer tend to show that they may throw any light on history or add to literature, instead of being merely the idle scratches of wandering pilgrims, no delay should take place in collecting complete and accurate copies. Those given by Pococke, Kircher and Niebuhr, are confessedly erroneous. Those of Seetzen and Burckhardt are better, truly remarks Professor Robinson, who goes on to say,[a] hitherto Professor Beer has found no date in those inscriptions already deciphered; but that on palæographic grounds and the character of the writing, he supposes the greater part of them could not have been written earlier than the 4th century. The letters like crosses are also adduced by Professor Robinson as proving them to be posterior to the Christian era and to the work of pilgrims. These are cogent arguments in favor of the modern origin, but how these crosses, strong resemblances to which may be found in Egyptian hieroglyphics and in characters more ancient than the Christian era got into the Sinaitic alphabet,[b] by

[a] Researches, vol. 1, p. 553.

[b] Not one Jewish or Christian name has yet been found. In some cases I have observed crosses quite distinct from the inscriptions, which are evidently the recent work of pilgrims.

what great political revolution the characters of a written language and the nation which used it should have been so totally forgotten and unknown in the short space of the last 15 centuries, has not yet explained. Professor Beer finds the characters to belong to a distinct and independent Alphabet, " some of the letters are wholly peculiar and their affinity with the Cufic" he goes on to say " is so great as to lead to the supposition, *that the Cufic was afterwards developed from this alphabet.*" These facts I think are hardly in favor of the modern origin of these strange characters, which, and the nation which used them, even in the days of Cosmas, who wrote in the beginning of the 6th century, were as unknown as when Professor Beer commenced his researches. Some of the letters, he says, have more or less affinity with the Palmyrene and particularly with the Estrangelo. In form several letters much resemble each other, as is the case in other ancient alphabets.

The words which are not proper names, Professor Beer regards as belonging to an Aramœan dialect which, he supposes, may have been spoken by the inhabitants of Arabia Petrœa or Nabathœans before the present Arabian language spread itself over those parts.

The old questions as to the reason of these inscriptions being seen only in the rocks west of Mount Sinai, their entire absence on its eastern side, in Egypt, and in other countries west of the Red Sea, and their prevalence in the great routes which lead towards Mount Sinai and Jebel Serbal are still not satisfactorily answered. Professor Beer thinks they are the only known existing monuments of this Sinaitic language and character, although doubtless they exist in other places.

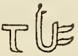
The suppression of these ancient languages and characters I am inclined to attribute in great measure to the great religious and social revolution effected by Mahomed and his followers, who esteeming the Koran and its languages as alone needful, burnt the whole of the superfluous learning of the Egyptians, written on perishable papyri but have left us from superstitious motives and indolence, its hieroglyphics graven in imperishable characters on the glorious monuments of that great and extraordinary country.

The strike of the hypogene strata is nearly parallel with the northerly direction of the peninsula. The dip is nearly vertical and towards the east.

Sherwut Hawa.

At 3 P. M. we continued our route along the same rocky slope with the ravine of Nekb Hawa below us to our left ascending all the way to the rocky barrier of Sherwut Hawa whence Horeb's imposing front burst suddenly into view rising 1,400 feet in stern and naked majesty, from the bottom of the wide valley or plain of Er Rahah الراحة which slopes from the base of the ridge on which we stood to the very foot of Horeb flanked on either side by lofty walls and pinnacles of granite and porphyry and forming a glorious natural avenue, or pronaos to the holy mount. Among these peaks Mount Catherine, and Abu Gurus to the south are conspicuous.

Abu Soheli.

We descended the barrier by the pass and wells of Abu Soheli. Here we observed two rocks, bearing Sinaitic inscriptions with the usual prefix 

Plain of Er Rahah.

The plain of Er Rahah is about two miles long by half a mile average breadth, and runs in a S. E. direction from the well of Abu Soheli to Mount Horeb. Its surface is in general unincumbered with rocky masses and evenly covered with gravel,—the detritus of the rocks which tower over it. Its surface is often pretty thickly covered with the usual balsamic shrubs of the peninsula. In this plain or valley, the largest in the interior of the peninsula doubtless where the Israelites long encamped under the shadow of Horeb, "The Repose," as the word *Ráhah* [راحة] literally signifies. *Raha* however another Arabic word [رحى] exactly describes this plain, signifying a plain surrounded by hills. I have however adopted Burckhardt's way of spelling it.

The rocks from Hajjar Abu Tok in the Nakb Hawa to Mount Horeb are chiefly granite, porphyritic granite, brown porphyry in veins or dykes in granite, and hornblende rock. All these rocks are penetrated by enormous dykes of basaltic greenstone. A coarse granitic detritus is seen at the bottom of the Wadi Hawa occasionally in beds of some hardness. The cementing matter is chiefly clay and oxide of iron, the result of the decay of the felspar mica and hornblende in the granite, with a little lime derived from springs.

From the plain of Er Rahah we first saw the cypress tree of the

convent garden in the valley of Shueib or Ed Dair. At the mouth of another valley running along the opposite flank, are the cypress trees, and garden spots marking the old gardens of the convent. This is the entrance to the valley of the 40 martyrs; Al Arbaïn or El Lejjah.

Having traversed Er Rahah we crossed the mouth of Wadi Sheikh (the high road to Suez and Wadi Gherondel,) which opens on Er Rahah from the N. E. and passed into the narrow rugged defile of Ed Dair (the convent) by the Arab burial ground at its mouth, and by the "Chair of Moses," towards the convent. The figure of the monk on the walls reconnoitring our small party soon became visible. A white flag with the red cross having a black one below it was over one of the turrets. Twenty minutes from the mouth of the defile brought us to the convent.

After a parley under the lofty walls, we dismounted, were duly hoisted up through the pigeon hole in the way so often described, and were not strangled by the loving embraces of the monks. Having partaken of coffee with the grey-bearded superior, Nicodemus, we retired to our cell attended by the worthy old monk Demetrius, a strange being, native of Hellas in the Morea. He spoke Hindustani fluently, to our surprize, and has repaired to this sacred spot after many wanderings and vicissitudes, to repent him of his sins, and to lay his bones in the dismal necropolis attached to the convent.

Ascent of Mount Sinai.

5th June.—After a night's refreshing repose we rose at sunrise accompanied by a Greek monk of Anatolia descending the steps from the gallery into the open quadrangle of the convent, we passed by the lower cloisters to a flight of steps leading down a narrow subterranean passage closed by a low iron door; after groping along its sloping floor for a few seconds, we emerged into a lovely garden filled with apricot, apple, almond, orange and other fruit-trees, whose light, graceful foliage, relieved the sombre hue, and stately forms of the tall cypresses. From the garden we passed through a door in its high wall, and stood on the slopes of Horeb. The sun had not yet penetrated into the depths of this valley.

The ascent lay in a S. S. W. direction by a defile obliquing up the mountain's flank of bare granite. Ten minutes brisk walk brought us to the Virgin's or the Mountain Well, Mayeh El Jebel, under a

rock called by our monk Hajjar Mariam. It is about a foot deep by 4 or 5 broad of clear, delicious, crystal water, delightfully cool. Temp. 59° 5 Faht. Air in shade 75°.

In twenty minutes more up the ravine, the chapel of the Virgin of the Ikonomos was reached; and a quarter of an hour more saw us through the two old confessional portals and the narrow defile, having taken second breath under the single cypress which stands a solitary sentinel near the well and chapel of Elias or properly speaking of Elijah and Elisha. Having provided ourselves with a rope and brass cup we were enabled to take a draught of the sweet water which lies at about 14 feet from the surface. The depth of the water was 7 feet. Temp. 58·5°. Air in shade 73° 4.

After a steep ascent of 15 minutes we stood on a bold, high, narrow mass of granite overlooking the valley of Es Sebaieh, on which the monk assured us Moses watched the battle of the children of Israel with those of Amalek ("Amalek Polemasser") in the valley of Rephidim (Sebayeh) below.

Thirty minutes more of a steep ascent brought us, breathless, to the summit of Sinai, partly lost in astonishment at the arid ruggedness of the wilderness of confused rocks which lay like a petrified stormy sea at our feet—and partly agitated by the certainty of having at length attained at least the immediate vicinity of the most sacred spots recorded in the Old Testament.

The monk pointed out a cleft in the rock as that in which Moses sat when he saw Jehovah pass before him. It is a natural fissure in the granite in which I could barely get shelter from the sun; situated under a large impending mass of granite at the eastern extremity of the peak.

The peak itself is a small platform of granite about 40 paces long by 20 broad. On it stands a mosque and 12 paces N. E. of it a small chapel, and the shell apparently of an old watch tower, evident remains of more ancient buildings. Under the mosque is a narrow grotto formerly the dwelling place of the anchorites and penitents who used to spend a period of prayer and penance on this secluded spot. A little below the peak is a well or reservoir of good water filled, it is said, by the rains and melted snows, 10 feet deep and 16 to the surface of the water. Its temp. was 55° 5′ and that of the air in shade 75.

On the descent of the rock to the right the Arabs show an impression something like that of a camel's foot, about $7\frac{1}{2}$ inches across the toes, $3\frac{1}{2}$ across the heel and $8\frac{1}{2}$ long on the surface of the rock. It is apparently a natural cavity modified by art, the Arabs assert it is the mark of their Prophet's camel's foot when he visited Jebel Músa, the Mountain of Moses, for such they invariably style this peak. It reminded me of the rock impressions of the "Sacred foot" in India and Ceylon.

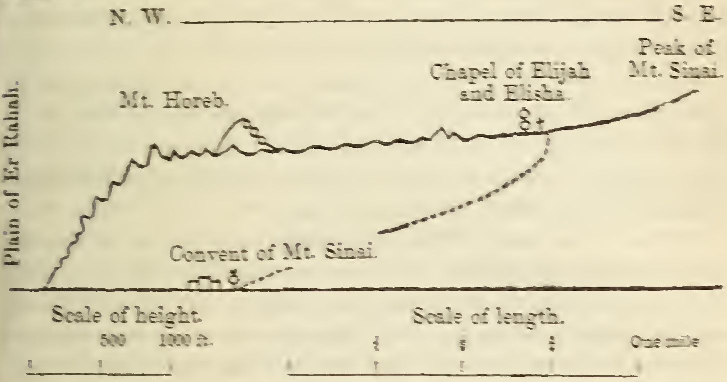
The day was tolerably clear, and the sun shining brightly, but we were not able to discern Tor, the Gulph of Suez or the Red Sea, South of Ras Mahomed, the most southerly point of the peninsula. The Elamitic Gulph, or sea of Akaba was distinctly visible, as also the mountains beyond. Schubert states the sea is visible on three sides of the peninsula. Neither the convent, the plain of Er Rahah nor Jebel Serbal are visible. Om Shomer and St. Catherine are hidden by the nearer ridges of Jebel Homr and of St. Catherine which bears S. W. St. Catherine is evidently higher than the summit on which we stood. Rüppell makes it barometrically 1,030 French feet higher than Sinai. The approximate height of Mount Sinai by the boiling point of water, I made to be 7,390 feet above the sea which is not very wide of the average of 3 separate barometrical measurements of Russegger, Rüppell, and Schubert, viz. 7,412 feet.

Lieutenant Wellsted, however, by trigonometrical observation, from two points within the sea of Akabah, makes it 7,530 and 7,480 feet above the sea, and 2,500 above the convent, which by the boiling point I found to be about 5,000 feet above the sea,—a near approximation to the truth. The thermometer freely exposed to the sun's rays on the summit rose from shade to 99·2°; the air calm and sky serene. In winter, the monks inform me, the summit is covered with snow which, in melting, fills the deep well just below the peak.

A pistol fired from the top of the chapel on the highest or eastern end of the peak produced some fine reverberations among the surrounding rocks during the stillness of the air which prevailed.

We descended after a two hours stay on the summit to the cypress tree chapels of Elijah and Elisha on Mount Horeb, where we made a short survey of this part of Mount Sinai which, with a subsequent trip nearly round the base enabled me to give the subjoined diagram.

It will serve to give perhaps better than description a rough idea of the profile of this mountain mass of granite from the level of the convent.



The small plain, on which stand the chapels of Elijah and Elisha, is accounted by the monks to be part of Mount Horeb, and the term of Mount Sinai is restricted to the peak above it to the S. E., called Jebel Músa. Numerous have been the ingenious objections to these old traditions. Be that as it may, I think there is no man who can gaze from the plain of Er Rahah on the front of that part of Sinai which the monks call Horeb, and after ascending the peak they call Sinai, and examining the base of this mountain mass and the adjoining narrow defiles, without coming to the conviction, that the whole map here described is the Sinai and Horeb of Scripture, without reference to any particular rock, peak, or cleft; and that the great body of the Israelites must have encamped on Er Rahah in front of that part of Sinai called by the monks, Horeb. No description can convey to the mind of the reader, the strong impression of the holiness of the spot produced by the surrounding awful scenery and peculiar physical aspect of this mountain on the imagination of the beholder.

It seems both puerile and unreasonable to hesitate, cavil, and doubt because the great leader of the Israelites could not see the camp from this or that part of the mountain, or because an ascent two or three times a day to its more inaccessible parts would have been a physical impossibility.

I can only say in my own case that these and other ingenious theories were immediately dispersed like the mists of night before

the rising sun, at the sight and examination of this singular mountain and the plain of Er Rahah.

Lord Lindsay thinks Jebel Meneggia to be the true Sinai; but after a visit and survey of the locality, I am of opinion that there are no solid grounds for such a theory.

Burckhardt on the strength of finding far more numerous inscriptions in the Sinaitic character on Jebel Serbal, and in the *wadis* leading to it; and taking for granted that these were the work of Christian pilgrims, a theory in which Professor Robinson more recently coincides, thinks Serbal has stronger claims.

But as I have stated before, the exclusive occurrence of heathen names in these inscriptions, and it may be added, the non-occurrence of that of Christ, together with the character in which they are written, rather induces the belief that the engravers were infidels, and therefore Serbal and not Sinai would be the chief place of their pilgrimage.

The central position of Sinai, as a place of refuge from the Egyptians on the west and the hostile tribes of Amalek and others to the east, guarded on all sides by narrow defiles, opening near its base, into the broadest valleys of the peninsula, and above all its abundant never-failing supplies of fresh water, render it physically speaking, the spot which would retain longest any nomadic tribe, armies, or other bodies of men.

From the plain of the cypress tree we descended into the valley of Martyrs, Wadi El Arbain or El Lejjah, by a partly made path in the rock, running on the opposite side to the convent. The little chapel of St. Pantalinion was perched on the rocks to our right, and a large wooden cross was seen in relief against the sky surmounting a high cliff.

Convent of the 40 Martyrs.

Passed through a garden of apricot, apple, fig, pomegranates, and poplars, irrigated by a fresh spring of clear water, to the convent—now deserted except by a couple of monks from Mount Sinai who have charge of the gardens and the pictures of the 40 monks who gained the crown of martyrdom. The course of the valley towards the western corner of the plain of Er Rahah on which it debouches, is N. by W.

Rock struck by Moses.

Between the Convent and Er Rahah many large masses of granite, fallen from the overhanging rocks on its flank, lie on the bottom of the valley: among the rest "the

Rock struck by Moses." It is a cuboidal mass of granite, somewhat large grained, 12 feet 9 inches high, 17 feet long and 10 feet thick. The corners have been rounded off by exfoliation.

A vein of closer grained reddish granite crosses it diagonally from one of the corners to the middle, passing through the entire substance of the mass.

Running across this vein on the W. side of the rock are 10 very distinct chinks, and two indistinct cracks, a fact which settles the long *vexata questio* as to whether there are 10 or 12 fissures in the rock, whence gushed the miraculous water. A late intelligent traveller Professor Robinson enumerates 10 only.

It is supposed that the number 12 had some reference to the number of the tribes of Israel, but as the story of its being really the smitten rock of Scripture is merely a monkish tradition, it is not of much importance whether there are ten or twenty chinks.

The seams are shaped somewhat like mouths—and Burckhardt thought they were artificial, but as I found one of them near the summit, pass by an almost imperceptible crack through the rock to the opposite or eastern side, and as these fissures are frequently seen in granite veins, I conclude them to be natural. It is possible their tips on the western side may have received a touch or two from the chisel of the monks.

The apertures are from 3 inches to 3 feet in horizontal length, and the breadth of the openings from 1-8th of an inch to 3 inches, smooth and apparently waterworn. The block cannot now be connected with any spring as it is evidently an insulated mass that has fallen from the cliffs above. Looking back from this part of the valley of Lejjah called by the convent Arabs (from this rock) Wadi El Hajjar Músa, we found we had lost sight of the peak of Sinai. Near this and below it, are the Sinaitic inscriptions copied by Burckhardt.

At the mouth of the valley we passed through the gardens marking the sites of former convents of the monks, on Er Rahah, and turning to our right took the road along the northern base of Horeb's front, N. Easterly towards the mouth of the valley in which the convent lies, (Wadi Esh Shuieb). The stone of Moses bore the name of "Giovanni Finati, 1827," and that of "C. Bradford 1839," the young American who died at Jerusalem and of whose fate Professor Robinson gives an interesting account.

At the base of Horeb we passed the so called mound in which Moses cast the golden calf's head, and an Arab encampment. Their simple tents of black woollen cumblies reminded me of those of the wandering castes of S. India.

These ancient burial grounds at the mouth of the convent valley, said to be originally as old as the Prophet, resemble those of the Malays, but have two stones erected within a raised circle of earth instead of wooden pillars to mark the head and feet of the corpse. The whole burial ground is also raised slightly from the level of the plain.

Instead of proceeding direct to the convent, I turned aside to see a rock from which Aaron is said to have addressed the Israelites when they danced round the calf in Er Rahah near the mouth of the Wadi Sheikh, and certainly he could have hardly selected a better situation for his pulpit, situated as it is near the junction of the wide valley of Wadi Sheikh with Er Rahah and that of the valley of the convent.

The rock is of no great height or extent and stands isolated in the plain. On the top are the ruins of some building absurdly pointed out by the monk with us as Aaron's house. It is more like the remains of an ancient watch tower than any thing.

About a mile nearer the convent at the foot of Horeb, was shown the granite slab on which Moses broke the tables of the law; nothing remarkable about it but a few surface indentations.

We re-entered the convent just as night was closing in.

Mount Sinai is a mass of granite, red in its lower portions; brownish in the central and more elevated parts, while the cliffs composing the summit are grey. These colours are so well defined as to be visible even at a distance.

The granite rock above the chapel of Elias whence Moses is said to have witnessed the battle with the Amalekites is a fine grained granite with a brownish compact felspar and dark mica in small scales. The rock of Aaron at the mouth of Wadi Sheikh is of a singular variety of porphyritic granite with reddish brown felspar crystals. The grey granite of the peak is composed of white felspar quartz, mica and a little hornblende and is small grained.

The red granite is often porphyritic, and composes most of the picturesque pinnacled summits, we view in drawings of Sinaitic scenery; it is also penetrated by dykes of brown, and black porphery previously described.

Pegmatitic veins, veins of felspar coloured green by actynolite, veins of quartz and rock crystal in hexagonal pyramidal crystals, both white, roseate and smoky, prevail in the granite particularly in the porphyritic varieties. The crystals are collected by the Jebeli or convent Arabs and sold as curiosities.

Large dykes of basaltic greenstone can be traced for miles over the granitic rocks. Veins of compact greenish felspar and eurite are not uncommon in the granite, near these basaltic dykes.

The rock composing Jebel Meneggia is principally of a chloritic hornblende and a white felspar, spotted green with hornblende. Some varieties would pass for diallage, in hand specimens, though the rock has an obscurely stratified structure. Its weathered exterior has a dark rusty colour.

The dykes of basaltic greenstone rarely overlap the granite and hypogene schist they penetrate, but seem to have existed in a solidified state in them, at the time they were broken up.

Faults of considerable extent may be thus traced even in the granite itself.

The following diagrams are taken from detached porphyritic granite rocks of Wadi Abu Tok to the N. W. of Mount Sinai, which have been greatly invaded by basaltic dykes.

The general direction or stratification of the hypogene schists, forming the lower ranges around Mount Sinai is nearly N. and S. but great disorder is visible both in dip and stratification. The schists are often seen on their edges.

Around Mount Sinai with the exception of the gardens, there is not so much verdure as in Wadi Hebron and Feiran where the waters of the springs linger in the bottom of the vallies. In Wadi Hebron, the tamarisk [*turfa* or manna] which is usually little higher than a bush sometimes rises to the dimensions of a tree nearly 30 feet high; we saw no manna either on or in the ground under

the branches. The leaves and stems have a salt taste which appears to be relished by the camels. This saline secretion renders it improbable that the manna should be an exudation from this plant, and if obtained must be, as Ehrenberg is of opinion, the secretion of an insect, a sort of Coccus.

The Arabs say that it is found on and under the tree and got us a pot of it in rather an impure liquid state at Mount Sinai.

Date trees are seen in the middle and upper parts of Wadi Hebron, from them and the date trees of Tor a pleasant "*araki*" is distilled by the Greeks and quaffed with much gusto in the convent.

The trailing *handhal* colocynth, with its orange coloured fruit fair to look upon but full of bitterness within, like the apples of the Dead Sea is occasionally seen hugging the sands.

Shaik Salih our Arab guide seeing me gather one of these bitter apples hastily ran towards me, thinking of course that I was about to eat it, and snatched it away: but presently returned with a fine bunch of *ham'r* in full yellow blossom; the green leaf is much relished for its pleasant sub-acid taste (like sorrel) and used by Arabs to quench their thirst. He begged me earnestly to partake of his prize which I did and found it allay thirst to a great degree. The name in Arabic حمر signifies also a tamarind.

In the pools of Wadi Hebron grows the rush *sumar*, the flag *khubba*, and the cotton podded *shiah*, the *ghissaneah*, the balsamic *ghillano*, [*mesembryanthemum copticum*,] and *beitharan*, (*santolina fragrantissima* of Forskal) the broom *ratham*, (*genista raetum*) loved by camels. The balsamic yellow flowered *yarra* and the stately *lebaid*, 10 feet high, we saw in Wadi Hawa near Abu Saili. It reminded me of the hollyhock.

The *beitharan* is abundant on the plain of Er Rahah; it smells like camomile and also the bitter *rhum*. We saw a wild fig tree near a well in Abu Saili. The *ghurkind* (*nitraria tridentata*) with its pleasant acidulous red berries, grows in Wadi Hebron. Our Arabs declared it is not used by them in sweetening bitter water. The camels browse on this thorn.

On the plain near Tor a few dates and palms, chiefly at the *wadi*, break the sterility of the flat sand. The *nebk* and *doum* are seen in the interior.

The temperature of the wells at Hammam near this I found 90° 5′ at the surface and 91° 6′ where the water bubbles up from the

limestone (temp. of air in shade 84°). A few gaseous bubbles escape from the bottom which have but a very slight odour of sulphuretted hydrogen, but the water has very little saline taste, and small fish exist in it. The well in which we bathed, being a sort of spa for the sick of Tor, is about 6 paces long by 4 broad and about 3 feet deep. The water rises to within 2½ feet from the surface. It is evidently slightly thermal. The temperature of two wells which lie on the other side of the town, viz. Bir Eshesh and Bir Mussact did not quite reach 80°. I did not ascertain the temperature of the third well, that of Selim, nearer the shore.

The hot spring of Hummam Pharoun, issues from the limestone and is said by Russegger to deposit salt mixed with sulphur. Its temperature is stated at 55° 7′ reaum. of air at same time 26° 3.

The wells which rise in the granite regions are usually pure and good. The water of Mount Sinai is deliciously cool and refreshing.

Tribes of Arabs dwelling in the Peninsula.

After Burckhardt's excellent description little need be said about the Sinai Bedouins.

The principal tribe is still that of Cuwaliha which comprehends most of the others except the *fellahs*, or slaves of the convent and the Muzeini east of the convent.

The Korashi were still under Shaikh Saleh Abu Nassir and muster now, it is said, about 60 able bodied men.

The Aulad Syed under Shaikh Musi, muster about 120 men.

The Muzeini under Salih Abu Ama muster, it is said, 200.

The Owarmi under Suliman 50, and the Alikah under Salim Budyako 50. The Turabin under Sheikh Salim Abu Sitti muster about 1,000.

The Bedouins of Akaba,—the Alouins are under Abu Enjado and the Haimut under Shaikh Mutteyr, the Tiaha of Et Tih, are under Ahmed Bin Ahmir and muster about 200.

The Bedouin females met with, did not strike me as much handsomer than their Egyptian and Syrian sisters. Their common dress is a black or deep blue cotton shift, close in front, leaving an aperture barely sufficient for the head to come through. Over the head they throw a dark coloured *turha* like a scarf and wear a white or light coloured veil instead of the black one seen in Egypt—but most of them merely wear the shift and loose drawers.

The best classes among the men usually wear a dirty white *thob*,

something like a carter's smock-frock with capacious hanging sleeves, confined at the waist by a girdle. Short loose drawers; a red *tarboosh* on their heads with a turban twisted round it. Underneath the *tarboosh* a *tagheia* or cotton skull-cap is sometimes worn, which can be replaced and washed. In winter they wear the white and brown striped woollen *abba* or a black *cumli* or blanket of goats hair. A matchlock is slung across the back, with a piece of match rope of *aggal* fibres twisted round the stock. Over the left shoulder is a leather belt suspending a rude cartouche box and priming flask of ram's horn, and over the right is slung the usual Arab sword with wooden scabbard; a flint, steel, and amadon, a curved dagger, the noted *jumbia*, garnish his brass-buckled waistbelt and *kummerbund*, while his feet are protected by strong buffaloe or camel leather sandals, and a short reed or cherry-stick pipe completes his travelling costume. An Arab however so well dressed is rarely met with, the intermediate shades ranging to rags and almost nakedness. Yet after all, these light breeched nomades appear to be one of the happiest races of the world.

Except the Arabs we encountered but few living things, a few crows resembling those of Europe more than the grey necked species in India; hawks, an eagle, and a red-legged partridge; sparrows, a few lizards and green locusts, the mosquito and common fly make the whole of the list. The hyæna, gazelle, and a sort of ibex are said to roam the mountains. I saw none of the burrows of the jerboa which in some of the passes of upper Egypt completely undermine the ground.

We found much to interest us in the customs of the convent of Mount Sinai and of its inmates, but this paper is already too long.

I obtained copies of some papers found deposited among the skulls in the chests of the charnel-house which contain those of the superiors of the convent, the bishops of Feiran and other elevated personages. Those of the multitude form a grinning ghastly pile.

The copies of these inscriptions accompany this paper.*

* Copied for me from an inscription, or marble, found in one of the chests of the skulls of Bishops, by Yuseff, monk of Sinai, native of Roumelia, 7th June, Convent of Mount Sinai.

✠

Τὸ παρὸν τίμιαν λείψανον ὑπάρχει τοῦ μακαριωτάτου πατριάρχου Ἱεροσόλυμῶν κυρίου Ὀσθυμιου· καὶ εγινετ' ἀνακομιδὴ ἔτος ά· χ· ξ· δ:

The custom of preserving and piling up the bones of monks is still kept up, but they have discontinued that of exposing the corpse on an iron bier until the flesh falls off.

ἀπριλλίῳ. α. καὶ ἐτέθη παλιν μετὰ τοῦ μακαριώτατου πατρὸς ἡμῶν ἀρχιεπισκοπου, κύριου Ἰωσηφ· α· χ· ξ· δ. απριλλιῳ· α.

"This is a precious relic of the most blessed Patriarch of Jerusalem, the lord Osthumius; and the recovery of the remains occurred on the 1st April in the year 1664; and they were deposited again with our most blessed father, Archbishop the lord Joseph, 1st April, 1664."

Copied from an inscription in one of the chests of skulls of the Archdeacons, by a Greek Monk.

✠

Οστᾶ του ὁσιου πατρὸς ἡμῶν, καὶ ὀντος νεου ἀσκητου Δαμασκηνοῦ ἐκ τῆς επαρχίας Κυζικου εκ χωρας καλουμένης Μυχαωνιας· εκοιμηθη ἐν Κύριῳ επ᾽ ἔτος 1696: σεπτεμβρίου.

*Ἀνακομιδὴ τῶν λειψανων αὐτου, ετος 1712, μαρτίου 20: αρχιερατευοντος του πανιερωτάτου πατρὸς ἡμῶν Αθανάσιου, και οικὸνομου Ναθαναηλ * * * * Θεω ζηλω κυνεθεντες οἱ ὁσιοι πάτερες, ἐκοπιασαν πολλὰ ἐς τὸ παρὸν ἐργον· μαλίστα ὁ γερων Ἰγνατιος.*

The bones of our holy father, being still young, the accomplished Damascenus, from the Province of Cyzicum from the country called Mychaonia: he fell asleep in the Lord in the year 1696: of September.

The recovery of his remains (took place) in the year 1712, the 20th of March; our most holy father Athanasius exercising the office of chief priest (Archbishop) and Nathaniel being Æconomus. The holy fathers being moved with zeal towards God laboured much in the present work especially the aged Ignatius.

Original Scrip found in a chest of skulls, Convent of Sinai.

χρῖσος, ανγγελη, σουσανα, μαρία γγιοβάνου, προσκηνητου, νικολαου, θεοδορου, ἱερομονάχου, ἱλία ἰωαννη, ἰλία νικόλα πανάγιότου προσκηνητου,

τον κεκημενον

στεφανος ιοχννα, τόν του προδρομο πέτρο, ιωαννη, ρανα προσκηνιτου γεοργιοτογιανο, αποστολι, προσκηνητου, σανκο, φεωρανια, μιχαλι, ανασασιου, διμητριου, σανκο, διμιτριου, προσκηνητου, υποδοις, ανκτα, ιωαννη, γεοργιος, σουσα, εκατεριν γηερπε στογιανη, τριφονος, διμιτριου.

This seems a mere list of names.

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III.—*Notice of the Habits of the large Indian Boa or Rock Snake.** *By Lord Arthur Hay.*

Beyond exaggerated and overdrawn stories regarding this animal little is generally known relative to its habits and structure—I trust therefore that the few following remarks may be found of some interest to the general reader though offering nothing of novelty to the experienced naturalist.

The great Boa Constrictor of India is one of the most dreaded enemies of the denizens of the forest, for though totally devoid of poisonous fangs its colossal strength renders it capable of overpowering most of the larger animals when once within its grasp.

The constricting serpents have been separated by most naturalists into two divisions, those of the new world retaining the generic name of Boa, and those of the old that of Python. In form and generic differences they disagree but slightly, and from all accounts they seem to possess similar habits.

The Boas of South America attain perhaps to a greater size than our continental Indian species, but still the Pythons of Sumatra, Java and most of the other Eastern Islands, have been found of almost incredible lengths; from 30 to 40 feet however may be considered the maximum length of these snakes, though few are found in Southern India of greater lengths than from 15 to 20 feet. I have received through the kindness of General Cullen what was considered in Travancore to be a large specimen of the Indian Python, it having been killed in the jungles of that country just after having swallowed a full grown spotted deer. Its victim was a doe and large with fawn at the time—the snake is 17 feet long and measured 4 feet in circumference when it contained its prey—this is one of the largest Pythons I have heard of, as having been killed in Southern India,—that is authenticated specimens—though I have frequently heard of much longer and larger monsters having been seen, though seldom actually measured.

There can be little doubt that such a snake would be fully capable of overpowering the strongest man; and the natives of the jungle from whence my specimen come assert, that Bison, are often destroy-

* *Python molurus*, of Linné. *P. tigris*, Daudin. *P. bi-vittatus*, Schlegel. *Pedda poda* and *Bora*, Russell. Pl. 22, 23, 24, and 39.

ed by them. This remains to be proved by ocular demonstration, for though perfectly possible and far from improbable, few would believe it without unimpeachable evidence.

When first examining one of the large reptiles the question naturally arises, how does it attack its prey, and when seized how is it possible to swallow it through so small an aperture as its mouth. A little further examination soon explains the difficulty, but as I do not suppose every one has the same opportunities I have had, and if so the inclination, I shall endeavour in a few words to show how beautifully nature adopts the structure of her ever varying forms for the position in which they are placed and to answer the ends for which they are created. On the first view the Python seems a heavy, thick though powerful snake, its body seemingly less rounded than the more active and graceful serpents. Its belly is cased in broad-flat uniform scales of a hard enamelled texture, the breadth of the body being their greatest length. These scutœ form in this as indeed in nearly all snakes the organs of locomotion. Its head is flattened and its jaws are armed with two rows of strong teeth, bent backwards; these when once buried in the flesh act like hooks and prevent any animal from withdrawing itself as long as the jaws remain closed; the vertibral column is so constructed that from the middle of each vertebra on both sides a rib articulates, so loosely, that the most perfect flexibility is retained; the lower ends of each pair of ribs are joined to the inner surface of the abdominal scales and can through certain muscles be moved forward by pairs; as each pair is moved the scale to which it is joined does the same and this being pressed upon the ground, the sharp posterior edge takes hold of the surface,—and so on with them all. This principle of progression may be best seen when a snake is ascending the steps of a stair, each scale in its turn being then easily observed to catch upon the sharp angle of the step and form a point from which the next is moved. As far as I have been able to observe the Python is sluggish in its habits and prefers lying in wait for its prey. The smaller ones feed upon frogs,—small mammalia, such as rats, mice, &c. and also birds, principally partridges and quails, these living mostly on the ground. The larger ones that are found in the jungle lie concealed from view by some bush or long grass, and when lying motionless resemble the trunk of a tree or bit of stone, so closely, that the eye is frequently deceived as to the object. They adopt this method of lying in wait from the comparative slowness of their progressive motion, their muscular powers

being more adapted for constriction than locomotion. At the root of the tail two organs may be seen resembling hooks or claws, and which have been supposed by some authors to be mere useless rudiments of limbs, but to the animal they are of the most important use, particularly to the larger species; for by them the snake fastens itself to a tree, thereby giving itself greater power and free use of its body when encircling some victim within its folds.

The neighbourhood of water or the vicinity of some forest path is the favourite haunt of this reptile—his tail entwined round the trunk or stump of a tree, his body carefully hid from view by the thick foliage or rank grass of the jungle, he lies perfectly still and motionless waiting for any unconscious animal that may be repairing to the stream to slake its thirst. The moment its intended victim passes within reach the snake darts upon it, making the jaws meet in its throat, and entwining its body in folds around the chest of the prey, so as to cause suffocation; death ensues merely from want of power of expansion in the chest to enable the lungs to play. When satisfied that life is extinct, the reptile gradually unlocks each limb by unfolding its body and does not, to the best of my knowledge, further break the bones of its prey (as is commonly believed) to better enable deglutition; if any bones are fractured it is merely from the force used in suffocating the prey. In the case mentioned above there was not a single broken bone in the body of the deer which is sufficient proof to show that deglutition can take place without fracture of the skeleton.

The next act is that of swallowing, and this is an operation that takes considerable time and exertion on the part of the snake. He generally commences by the head, which being the smaller part serves to extend the throat of the Python and prepare it gradually for the immense strain it has to undergo when forcing down the more bulky part of the prey. The mechanism of the jaws of the snake is wonderfully adapted for the distention they have to undergo—the under-jaw articulates so loosely in the upper that dislocation can take place at the symphasis without causing pain; in carnivorous animals and particularly among the felinæ or cats, such as the tiger, the condyle of the lower jaw is deeply set in a groove in the upper which makes it, combined as it is with its shortness and the strength of the temporal muscles, the most powerful jaw in existence. The tiger's jaws are merely meant to hold fast and tear his prey, for he, like the Python, bolts his food without mastication, the tuberculated

molars in the back of his head being only to crunch and grind bones. From the depth of the sockets in which the condyles are placed, a lateral motion is impossible, whereas in the ruminating animals, its shallowness enables them to use the lower jaw laterally as well as perpendicularly. In the Python however, beyond the act of holding its prey, the jaws are not of any use and consequently nature has only provided them with a structure to answer that end already noticed in the recurved form of the teeth. Dislocation takes place as gradually as the increasing size of the prey renders distension necessary; the lower jaw hanging at length quite loose and disconnected from the upper.

It is an erroneous idea though a very prevalent one that the snake covers the whole of its victim with saliva from the tongue before swallowing it. A single glance at the structure of the tongue of any reptile would at once prove the absurdity of this notion, that organ being of a very long and slender form, wholly unadapted for either licking or tasting. The glands that generate the saliva are only called into action when the animal has begun to swallow. The mucus then secreted naturally assists deglutition to a great degree but it is never poured forth till the animal actually begins to swallow. To prevent suffocation while forcing the body down the œsophagus, two small muscles, attached to the lower jaw and also to the trachea have been discovered which can bring forward the larynx nearly to the mouth, which would enable any one to observe the larynx opening and shutting while deglutition is proceeding. After the entire animal is swallowed, a kind of lethargy pervades the system of the snake and he then may be safely approached. Of this the natives are well aware and attack him in consequence without fear. Such are a few of the habits of this monster reptile. Much information regarding it is yet required which could easily be gained by persons living in the neighbourhood of large jungles where it always arrives at the greatest size, while a few notes concerning the dimensions of specimens killed, made upon the spot, would go further towards our knowledge of the sizes arrived at, than all the vague conjectures or hearsay reports often so freely circulated without any foundation.

IV.—*On Supposed early Celtic or Scythian Vestiges, remaining in various parts of the Carnatic. By the Rev.* W. TAYLOR.

The paper by Captain H. Congreve, No. 5, in the 31st number of the *Madras Journal of Literature and Science* attracted my attention at the time of publication; and awakened the recollection of inquiries made by me several years since, and of some recent conversation, on northern tribes and people, with a German Literate, to whom I may have occasion more fully to advert. The incident—occurring as far back as 1835—which first drew my attention to the general subject, may best appear presently in its own connexion. After reading Captain Congreve's paper, there rested on my mind a vague impression not only that I had written something pertaining to that matter, but also that it was printed. I searched the *Madras Journal* in vain, and also another Madras periodical, with the same result. But now very recently, when engaged on the manuscript* entitled "*Congudesa rajakal*," and in turning over some past studies, long neglected, I met with copies of papers in the Tamil language, and with translations of the two principal ones; accompanied by an introduction, in the shape of a letter to the Editor of the *Madras Journal*, written in the rough, but not copied fair; and, as appears tolerably evident, set aside, on my attention being attracted in 1836 to the revisal of part of Rottler's Dictionary. The whole matter had faded from my recollection, until imperfectly revived by the paper adverted to. What I may have to state may be better received after the publication of Captain Congreve's paper; and it has greatly helped me to clear up what was to me obscure, as to old remains sometimes termed "houses," and sometimes "pits." The Cromlechs it now appears, are the *ancient houses;* and to be distinguished from *ancient excavations:* concerning both of which matter is forthcoming.

In the development of my present object, it seems to me best, to insert a copy of what I had written as an introduction, divested of its epistolary form. Then to add the two translations made previously to writing that introduction; to give a translation, which I shall

* To prevent mistake it may now (June 1848) be expedient to note, that this present paper was forwarded soon after the publication of No. 31. The Manuscript referred to, translated with notes, appeared in No. 32; the selection, of course, resting with the Editor.

have to make, of another very brief paper, relative to chiefly one locality; and to close the whole with some general annotations. Hitherto the subject, I believe, has received but little attention from Europeans; but it may be deserving of more; and possibly the persons best qualified to pursue an investigation would be gentlemen of the order in society specified in the document immediately following.

The paper which, in 1836, I prepared, as an introduction to the subject, is here annexed: " Some time since when I had issued a prospectus with the intention of publishing some native manuscripts one of them being the " Pandion Chronicle," I met, at the reading room of the Literary Society, with a gentleman deservedly well known in the ecclesiastical, and literary circles, who, while hinting some doubts, whether any thing could be successfully accomplished towards elucidating the ancient history of the peninsula of India, at the same time inquired if I had met with any book, or manuscript, referring to certain curious ancient remains, which he alluded to as existing specifically near Chittoor; consisting of small grotto-houses, or possibly tombs, which on being opened had been found to contain pots, or jars, which tombs, or grottos, the natives termed *Panja-Pāndavāl* (or the five *Pāndavas*). This gentleman further added that a Surgeon (now a member in the Medical Board) had carefully examined these pots (or urns, as we may suppose them to have been) and declared decidedly that the bones did not belong to the human species. It was also added, that the tombs or houses, were very small, and could not, at any time have been human abodes; as also that Colonel Mackenzie had published an account of them; and that some reference to them might be found in (the then) Colonel Welsh's Reminiscences.

"The subject was at that time quite new to me; but was borne in mind. Down to the present time I have not been able to meet with Colonel Mackenzie's printed account; though doubtless he made use of materials in his collection, to which I have presently to advert. The account by Colonel Welsh of the *Pānty-wār* and their singular mountain-top dwellings, above the ghauts, I subsequently had an opportunity of perusing; and found these to be quite a different subject of consideration. These bandits, merely assume that they are descendants of the ancient, and aboriginal, inhabitants of the Mysore country: the term *Pantya-wār* meaning only ancient people; and possibly they may descend from the *Oyisala* or *Valala*

rulers, who were lords of that land, long antecedent to the first accession of the dynasty whence the present *raja* is an offspring; concerning which early *regime*, I have a manuscript already translated, from the Mackenzie Collection, bearing the general title of *Congu-desa-rajakal.*

" At a later period than the one referred to, while investigating the contents of the Mackenzie MSS., I met with a paper on the subject of the aforesaid ancient remains, which was read, copied, and put by. More recently another shorter paper occurred, which I at once translated, and being reminded of the other one, I recurred to it, and translated it also. The shorter one seemed to be an abstract of the first; and both by the same individual native. It has seemed to me that it might be well to give copies of both translations, as further specimens of the lighter and more versatile parts of the collection, whence they are taken.

" They present a subject curious, yet still dark. The various traditions narrated show that the present natives of the Peninsula know nothing certain about these remains. Yet the kitchen utensils said to be discovered, in some of the caves, &c. are those used by natives still; indicating an affinity of relationship. The tradition placed first in order, is derived, I conceive, from the opening portion of a very voluminous, and, in many respects, valuable Manuscript entitled *Chola-pattayam;* (Prof. Wilson's Des. Catalogue, vol. 1, A. II. 2; and Or. Hist. MSS., vol. 2, App. p. 34,) wherein the same account substantially is recorded. These accounts have an air so legendary that, though of use to elucidate the habits and modes of opinion of the people among whom we dwell, they seem, for the rest, not worthy of special confidence.

" It may be noted that the gentleman before adverted to, remarked at the time, when speaking on this subject, that similar tombs (or cairns if such they be) had more recently been discovered in Siberia; with similar contents. In what book, or narrative, the statement is to be met with, I do not know; but the simple fact of such similarity, assuming, as I feel bound to do its correctness, is a clue of some importance. I suspect some possible coincidence with the topes in the *Punjaub;* of which so much has been written. These however are, in part at least above ground structures. I remember reading in one of Ferishta's historical productions (though the book is not now at hand for reference) that one of the Tartar chiefs who made an incursion into India, and carried thence much plunder, was at his death, in his

own country, buried in a sepulchre with a quantity of gold-chains, and other ornaments, part of the plunder, and covered with a cloth of gold: corresponding with what is stated, in one of the following translations, as to the tombs of the *Simancal*, or honorable men. Native history uniformly declares, that various tribes of barbarians from the North, or North-West, at different times entered India: and even ruled the whole extent of country. And a smile of incredulity will not easily set this, however imperfectly given, testimony aside. I would not draw any conclusion, without more extensive, and better data. But I would suggest that some of the young, intelligent, and enterprising, civil servants of the Company, who in pursuit of their revenue duties are in the habit of intersecting the country, in all directions, might inquire into, and describe these remains, if they still exist; and others better read than myself in Siberian, and other, travels might give a *comparative* description of Siberian, *Punjaubi*, or Cashmerian antiquities, of like character: whence possibly some definite conclusion might be drawn. I will only add that *Marcandéya-rishi* mentioned in the following papers, and so well known to *Hindu* fables, is, by all fair inference, an antediluvian patriarch—that his name, in all ancient maps, is given to a famous town North-West of India,—that Samarcand, its modern Persic name, is an abbreviated corruption: "Marcand for Marcandéya (as they spell Bickermajit for Vicramaditya) and the prefix *su* denoting *good* or *sacred.* The locality of Samarcand is not very remote from Siberia. It is the locality of the ancient *Sacae;* whence I believe we derive Scythia and Scythians: one with which India, in earlier ages, unquestionably had some connexion, or relation. I shall not however here enlarge. We as yet want a greater number of facts, on which deductions can be more safely founded, as to the ancient relations of India; and the origin of its various classes of people."

So far proceeds the introduction heretofore written. At a period, later than that of making two of the following translations, I met with a notice of cutting into topes in the *Punjaub*, of which I took a memorandum, sufficient for my own recollection, without being a copy. It here follows, as I might spoil it by attempting emendation. The reference to the number of the Journal will enable any one possessing it, to consult the entire paper.

"In twelve days—they—had discovered nothing but a kind of square
" cell, in the centre of the masonry, constructed of stones regularly cut.
" This cell which was about 8 feet square was filled with large rough

" stones. M. Honigberger forbore to penetrate farther, &c.——— " within three feet of the centre—they found in the masonry a new " construction, of a round shape, of very small stones, cemented toge- " ther, enclosing a small cell, a foot square, formed by six slabs of " black stone, very regularly cut. In this chamber situated in the " centre of the monument, and two or three feet from the ground, M. " Honigberger found a box of soft, compact pot-stone (*ollaris*) yellow " with grey and black veins, which is found in large masses in *Kan-* " *dahar* ; it has evidently been turned, and bears traces of the ope- " ration. A description follows; with an enumeration of the con- " tents of the 3d compartment of the vessel—these appear to be si- " milar to the vases, described by Dr. Malcolmson, as found at Hy- " derabad."

" In the centre of this inner *tope* (the *Boorji-Kenri*) was made a " cavity formed by six stones, of regular shape, about a foot square, " which contained a bronze basin gilt, of a round shape, not high, " about 8 inches in diameter, much oxydized ; the bottom being almost " entirely gone. This basin was covered with a fine cloth, which fell " into powder when touched."

[*Asiatic Journal for January*, 1837, *p.* 52—54.

Translation I.

Account of Ancient Subterranean Dwellings, from verbal accounts, obtained in the Jaghire and Arcot district.

They say that there is no account of the *Pāntu Kurzicāl* (or ancient *subterranea*) in any written record. In consequence there is no obtaining, from any one, any thing like a regular or well connected, statement concerning them. In what follows, there will be offered an account according to the oral traditions, given by various persons. That is say,

In the first place, these ancient excavations are not spoken of by one uniform term : but are variously named by various persons. For instance, by only a few, they are called *Pantu-curzi*; while some persons term them *Padu-curzi*, and some *Padai-cudi*; others *Pantu-Samāthi*, others again *Pāndavāl-curzi*, *and Pantavāl-kovil*; and others *Vedar-cudi*, or *Curumbar-cudi*; others *Vali-cudi*, or else *Curungu-bara*. The places where these are found, so far as I have seen with my own eyes, are in the Company's *Jaghire* the following—*Padavūr*, *Vallam*, *Mammai*, the vicinage of *Chingleput*,

Anni-ùr, *Cunnatùr*, *Avàthùr*, *Kūvāthur*, *Vàiyà-vùr*, *Kolattur* *Chittamur*, *Uttra-mérur*, (Ootramaloor) *Ayar-pākam*, the mountain belonging to *Vellam-pākam*. Besides these places, there are others in the Company's *Jaghire*, which I have not seen, and in great numbers, as the people say. Besides, in the *Chittoor* country, and in *Tirutoni*, in the country round *Gingee*, in the *Bhavani* district, and to the westward in a great many places, they are to be found, as some trustworthy men report. There is sufficient foundation to believe these statements. For the rest, the details concerning them are the following:

Pantu-curzi, means ancient excavation ; *Padu-cudi*, means the dwelling of suffering, or pain ; *Padai-cudi*, means the place of the funeral bier ; *Pantu-Samāthi*, means the place of depositing dead bodies of old time ; *Pāndavàl-Kovil*, means the fane of ancient people ; *Vērdar-cudi*, means the abode of hunters ; *Curumbar-cudi*, the dwelling of the *Curumbar* (wild people) ; *Vāli-cudi*, means the abode of men having tails, like monkeys ; *Curungu-bāra*, means the stone-houses of monkeys.

1. Concerning the history of these things, some say as follows :— In the commencement of the era of *Sālivāhana* the Brahmans, incited by certain famous astrologers who were *Sastris*, examined their own astrological books, and declared before hand that destruction would come by a rain of fire. The men of that day, being awakened, took counsel together ; and, with the view of preserving their lives, constructed houses of black stone (pegmatite, or sienitic granite) at the foot of mountains, and in wilderness-places. In these having placed all needful provisions, they went, and dwelt in them. Then a golden shower fell ; and some, from the desire of collecting gold, went forth from their retreats to gather it, and when they did not think of it, it rained fire. Those who went out to gather up the golden shower, all perished. Some who were within these stone-houses perished, by reason of the fire rain. Some although suffering greatly, yet survived ; and re-peopled the country. Hence these places came to be named *Padu-curzi* or sufferance-caves, as some report.

2. Some narrate the following account. Towards the end of the *Dwapara-yuga*, the offspring of the *Pāntavar* (ancients) so called dwelt in the world. They were much more diminutive than men, and like pigmies. Their food was the *rāvēlai* and *nāvelai*, so called seeds or fruits. At the same time they possessed the strength

of seven elephants. They had no marriage relations; but were, in this respect, like beasts of the field. It was an easy thing, for them, to split rocks. These pigmies, for the convenience of their own residence, constructed this kind of houses under ground. In the flood, at the end of the *Yuga*, they all perished. Subsequently these old excavations remaining, they were termed *Pantavār-curzi*, after these same persons, as the story goes.

3. Some say that at the beginning of the *Caliyuga* the five *Pāndavās* dwelt in the wilderness; in consequence of *Duryodhana's* persecution of them. Then, they having come to dwell in the waste places, in order that people might afterwards know that they dwelt there, they constructed these dwellings, as some say. Hence they are called *Pandavāl-curzi.*

4. Some deliver the following account. In ancient times men paid homage to goddesses named *Nīla-mūcari;* and monthly (annually?) celebrated a festival. But since, if the festival were to be celebrated in habitations of men, it would be defiled, and attended with the destruction of human life, they built these houses, near the foot of mountains, and in waste solitary places; and carrying thither all needful provisions, went annually, and dwelt in them, during the period of the festival. Hence, as it is said, they came to be called *Pantavāl-Kovil** fane or temple of the ancients.

5. The account of other persons is to the following effect: after the flood, at the end of the *Yuga*, this world was all covered over with forest, and inhabited by ferocious hunters, and wild beasts. Then these same hunters, killing the beasts, cleared away a part of the forest. In those days, with a view of preserving their wives and children, from the savage beasts, they constructed these places. Thence these were called *Vedar-cudi* hunters' huts. Afterwards, the *Curumbars* appropriating these places to themselves, they came thence to be called *Curumbar-cudi*, as they say: that is dwelling of the *Jainas.*

6. Some give the following narrative:

During the reign of *Rama*, men having tails, and like to monkeys, inhabited these kingdoms. These were ferocious tribes. They possessed the *Cāma-rūpa* (form of *Cāma*, that is, monkey-like.) They were possessed of heroical qualities, and were very courageous. They were exceedingly able to cut out rocks, and carry (heavy)

* These I suppose to be Cromlechs.

stones. They constructed these stone caves under ground, for their own residence; and, after living in them for a length of time, were destroyed in the deluge, at the close of the *Yuga.* In consequence of which these came to be called *Vāli-cudi* and *Curungu-bara,* monkey dwellings.

7. Some say to the following purport.—In early times *Rācshasas* dwelt in these lands. They had a deceptive form (capable of various appearances—Protean): they dwelt in the forests, like wild beasts. In order to preserve their wives and children, they constructed these kinds of stone houses, underground; and as they resided in them, these acquired the name of houses of *Rācshasas.*

8. In former times the son of *Mricanda-rishi* was *Marcandēya-rishi;* in the time of both of whom, mankind lived 900 years, 1000 years, 1900 years, and did not die, even until the time of the flood; and were healthy. During many years they were strong and stout; afterwards feeble through age, like ripe fruit; and being unable to rise up, they remained stretched on their mats. Their body was like the ripe pumpkin-fruit: the eye only remained uninjured, and sight clear. It was very difficult for them to eat, and the like. Besides they always remained as if like corpses in a lying posture. They had great numbers of grandchildren; and there were many wives of their grandchildren. Such kind of ripe-fruit-like persons, remained a long time lying in their houses. At last, at the time prefixed (astrologically) for their death, the younger persons did not like that these ripe-fruit-like men should die in the houses, and constructed, for each one, a stone sepulchre under ground, in which they put him, together with the wealth which he had acquired, with pans, pots, fire-wood, and all other similar kind of provisions daily. As long as he lived his relatives went and watched at the door of that sepulchre; at length when the end was come, and he had obtained beatification, the most aged among his relatives came, and having made the lamentations closed up that door with earth, and by an addition of other earth they made it thoroughly secure. The cause was this—if he died within the house, the house would be defiled—his personal utensils were defiled—and if his property were inherited, it would not only bring pollution, but would be a sin, and would tend to the destruction of the family: according to the traditions which they followed. That this is certain a great many persons aver for true. Thus the places of sepulture constructed by the *Panta-varcal* (or ancients) in early times are called stone-sepulchres,

or *Pāntu-curzi*, *Pādai-curzi*, *Pādu-cudi* or *Pāndaval-samāthi;* so they maintain for certain.

These excavations, are not merely of one kind, or fashion. In the places which I have seen, some are four-sided, some are round, some are built in fashion of a* fort, some are very large, some small, some a little small, some are covered over at top, some are without top covering. In this way they are of very various sorts. Some of them are called *Simancal-curzi* or sepulchres of honorable men, some are called those of in some degree, honorable men—some are those of common people, some those of poor people, some those of beggars. In this way, it is said, there is great distinction of rank observable. Besides, in the sepulchres of the honorable men, all the wealth they had acquired was put, as it is said, and it is also reported that many persons, after searching, took away the said wealth. In other dwellings there was nothing (as to wealth); but only pans, pots, a fixed *kurvi* in wood (kitchen utensil) an instrument for reducing cocoanut into pulp; knife, bill-hooks without handles, hatchets without handles, chunam-pots, round stones, curry-stones, and hand-mills. In the *Simancal-curzi* countless treasures, they say, are to be found; and many persons have taken such away, as people still assert, and very strongly maintain.

Translation 2d.

An Account of Ancient Excavations.

1. About the 25th year of the era of *Salivāhana* certain *Brahmans*, who were astrologers, came from a great distance northward; and announced their astrological predictions to the people of this (southern) country.

They declared that on a certain day of a certain month, when the sun would be in a particular constellation, there would be a fire-rain; which would destroy all mankind. Whereupon the people of this country, taking counsel one with another, with the view of escaping destruction, and preserving their lives, went to the hills, and brought thence large slabs, and great stones, and constructed those stone-houses, under ground, which are now termed the ancient excavations (*Pāntu-curzical*); and, placing within them needful provisions, they, at the time indicated (by the astrologers), took refuge therein. But before the fire-rain, there was a golden shower. Several men incited by cupidity, went forth in order to

* Cromlechs.

collect the gold. At the same time the fire-rain falling, destroyed a great many persons. Those persons who, not being stimulated by the profferred gold, continued still shut up within the stone-houses escaped. In this way originated those old excavations. But since a long time has elapsed, people now erroneously think, that the *Pāndavas* resided within them; and hence term them the *Pāntu*-grottoes. They ought to be termed *Padu*-caves; seeing that were houses, or dwellings, constructed in order to escape from suffering (or danger.)

2. Some persons term them *Pāntu-covil* (or old temples, or fanes). The detail is thus; anciently men paid homage to the goddess named *Nila-Mohini.* The village-people annually were accustomed to render offerings to it (this goddess) each one going alone, that the offering might not be polluted. As this was a subterranean goddess, and since, as a preservative from pollution, it was necessary to conduct the worship separately, some persons say, that those stone-houses, called *Pāntu*-caverns were constructed in the ground; beneath every house, and all needful matters being put therein, the annual offerings were every year made.

3. Some term them dwellings of the *Curumbars.* That is to say, while this land was still the *Dandaca-aranya* (or *Dandaca* wilderness) after the hunters (spoken of in the *Ramāyana*) the *Curumbars* continued to dwell in these wilds. Some say, that they constructed these houses called *Pāntu*-caverns, in order to protect, and preserve, their wives and children.

4. Some term them *Hunter's*-caves. Anciently, before the times of the *Curumbars*, those who were in this *Dandaca-aranya*, with a view to protect their wives and children, constructed these stone-houses, under the ground. Such is the account of some persons.

5. Many persons call them *Vāli*-houses. The meaning is, that during the wars (between *Vāli* and *Sugriven*), in the reign of *Rama*, men with monkey-tails called *Vāli* dwelt under ground. They are stated to have been *Cāma-rupi** (that is like the images of *Cāma*). They constructed these houses; as some say for their places of abode.

6. Some term them *Pantu-nithi* (ancient hoards). The reason is this:—In early times, ancient men constructing these houses, put therein the wealth which they had acquired, and placed a magical

* *Cama-rupa-desa*, one of the fifty-six Hindu countries, is considered to be Assam. The Mughs of that country have a peculiar kind of countenance.

spell as a guard; they also took a man alive and burying him therein, killed him: and if now these depositories be dug (or cut) open, and examined, that ghost* conceals the whole; but if the proprietor come, it will be found; or if a human sacrifice be offered, it will be found: so they say. Besides they add that in some places treasure has been privately appropriated.

7. Some term them *Pāntu-Samāthi*, old burying places. This is narrated according to the *Purānas*. In the days of *Marcandeya-rishi*, the son of *Mricanda-rishi*, the god *Siva* gave to *Mārcandeya*, sixteen years as the term of his life. At its close *Yama* came to seize the youth; *Siva* said, I have given him to be always sixteen years; and on saying so killed *Yama*. Then *Bhūmi-dēvi* (goddess of the earth) not being able to sustain her load, according to the recommendation of *Narayana*, and the four-faced one, *(Brahma) Siva* again raised up *Yama;* and appointed that men when old should die of themselves. From that time forwards men began of themselves to die. But their age was very great. They lived to one hundred, two hundred, three hundred years, and upwards. Beyond that period those who survived continued bed-ridden, and unable to rise. Should the dying breath be drawn in the house, it was thought to be pollution; and therefore these houses were constructed apart, and making a bed of baked potters earth, they placed the aged decrepid person, like a ripe fruit, within it: also they put therein provision sufficient for a week; and then, together with the man lying in it, put it into the cave. As soon as it was known that he was dead, his aged relatives made great lamentations in that place; and shutting up the cavern (or house) covering it with earth brought from some distance around, they secured it well; and then, after bathing, returned to their houses. Thus some say. This last account seems to be the right one. But concerning these things, among many different persons, there are many varying opinions.

At the time when the two foregoing papers were translated, I was assisted by *Vencata-raya-pillai*, (since dead) son of a Tamil poet, the author of a popular *Nátaca*. *Vencata* stated that, when he was young, he was employed at Chingleput, connected in some way with the *Nanji-raja* then staying there. It was in 1821, and his recollection

* The shade, or manes.

in 1836-7 he said was not perfect. But he remembered seeing two of those caves. They were among the mountains, on the side near the *Pálar*-river. A gentleman named Fullarton was judge; and under his sanction, convicts, and others, were set to work. These two caves were found one and a half foot below the surface of the ground. He thought they were about 8 feet square, as I understood him, formed of blackstone. Inside was found an old rusty sword, and an earthen jar, said to contain nothing.

Within the fort of Chingleput also there was a large room discovered: the sepulchre, as supposed, of a *raja*. It contained a turban and jewels; and there was a copper plate inscription. Speaking of the former in comparison he said they were like a tub or vessel, but this was a room; and also under ground.

I am not at present exactly aware of the origin of Chingleput fort; but there were, at an early period, ferocious chieftains in that neighbourhood; details of whose atrocities have been traditionally handed down; and are embodied in the miscellaneous Mackenzie papers.

Translation 3d.

Of the Old Caves at Paduvúr.

Anciently men wearing tufted hair, *Curumbars* and various others, of the *Jaina* credence, dwelt in this town. They were the aboriginal residents. Those beings, from very old times, were ruled by *Jaina* kings. By a *Jaina* king named *Pandya-dever*, this town was given, as an entire and independent endowment, to a *Jaina-básti* (or temple) built by the *Jainas* here. In proof of this, on the site of the said fane there is here its original cause of foundation: that is, a *Jainēsvara* image. And, seemingly belonging thereto, in proof of the said *Sarva-mānya*, gift (or endowment,) there is here an inscription on stone. The subject inscribed therein is as follows:

The divine gift of *Svasta-sri-Nayanár* ruling the world. *Paduvúr*, and its entire precincts are given in full and perpetual grant to the aforesaid temple—so it is recorded. This full endowment, for a length of time, pertained to the *Jaina-basti.* Afterwards in the days of *Adondai-Cholan*, when, by the advice of the *Brahmans*, he destroyed the *Jainas*, it was added to the common revenue.

Anciently in this town, they did not keep the very old people (in the houses) until death; but seeing the time approach, they put them in very strongly-made earthen jars, together with food suitable for

them. Such was the practice in this *Paduvūr*. They would die off, some little time after being placed there. Such kind of earthen jars are termed *Matamaccachāl*.* Though these were placed in early days, yet even now many such *chāls* (pans or buckets) are to be seen. Human bones, and drinking vessels which had been placed therein, have been taken out, and buried. In this way the anciently pleasant suburbs, which were as a continuous town, the towns-people turned into a half desert; and in it having placed those *Matamaccachāl*, they returned. The posterity of the *Pāndavas* and other wealthy people, in order to preserve for many days, the memory of their several state, or renown, having built sepulchres, they placed the people of their race there, and returned (or were *accustomed* to place them). As the race of the *Pāndavas* was put therein, and as they were, of old custom, burial places, they were called *Pāntu-curzi*. As some were placed there being alive, and as they suffered being there, these places came to be termed *Padu-kudi*, and *Padai-kudi*, dwelling of suffering, &c. As these *Padu-kudi* were here from ancient time, the town came to be called *Paduvūr*, town of pain. In the time of *Adondai-Cholan*, as two *Saiva* images were consecrated here, the *Jaina* renown was shut up (or buried). Again, in *Krishna-raya's* day, a *Vaishnava* fane was here consecrated.

In this *Paduvūr*, near to the old excavations there is an inscription on stone. But being very old it is not possible to distinguish and read off the letters.

To the east of *Paduvūr* there are seventy-five of these ancient pits or caves. To the South of *Paduvūr* they are in a row (as I understand the imperfect passage) to the north there are sixty ancient excavations.

So far proceeds the brief translation, which I have now made for the present express object. In reference to this *Paduvūr*, I cannot but think that the name commemorates one of those cruel tragedies, in the extermination of the *Bauddhas* and *Jainas*, of which so many occurred: made by kings under the influence of *Saiva-Brahmans*. In another paper of the Mackenzie collection it is said that the *Bauddhas*, or *Jainas*, were crushed to death in oil mills: and as a particular kind of drinking vessel with a peacock's-tail fan, was a

* Which, I apprehend, must be rendered—'heretic dog kennel.'

distinguishing mark of devotees of that class, I conceive it to be not impossible that the crushed mass, with drinking vessels, &c. were put into those jars and so buried. The contemptuous name given to the said jars traditionally, of course by *Hindus*, tends to confirm the supposition.

In a brief document which I find annexed to the foregoing, it is stated, that the *Curumbars* had sixty-four forts. It is also stated, that they took part in the wars of the *Pāndavas*, and were greatly scattered in consequence. The name of their original country is stated to be *Toda-nādu;* which, in a striking manner, would indicate the *Toda-vār* of the Neilgherries as their descendants. The chief occupation of the *Curumbars* was also keeping flocks. A jocular proverb, it seems, was hence formed at their expense; they being a little dull of wit.

In case of a death occurring among them many of the tribe congregated together; and each one had his head cleanly shaved. Occasion was taken hence to kill many hundreds of them, at a place called *Nerumbùr.* In another paper I remember this treachery is ascribed to the *Wiyalvàr* of the *Agniculam,* and it was accomplished by means of the barber tribe. Mention is made of twelve of their forts. *Porzal* (the red-hills) being the chief one. But one is named *Puliyūr*, and I suppose* *Pullicondah* to be a hill near that town.

The *fire-race (agniculam)* are supposed to be Siberian in origin. Hence it is open to doubt whether *cromlechs*, caves, &c. were the work of *Curumbars*, or of different classes of their conquerors. The papers translated seem to indicate the former conclusion. I should myself rather incline to the latter.

I have heard that there are caves of the kind indicated at the red-hills, only ten miles from Madras; and *Cunnatur*, or *Connatore*, is only fifteen miles from Madras, and two or three miles from Poonamallee. The exact locality *of Paduvūr* I do not know.

That the greater part of the ancient remains indicated are not *Cromlechs* is quite clear. They have a nearer affinity to the *Panjabi topes*, and are still more likely some of them *Patan* or *Moghul* in

* In further allusion to Captain Congreve's paper—I remember, several years ago, noticing something peculiar in the arrangement of stone circles on a little rocky eminence between the Mount and Palaveram. As regards Stonehenge is it not possible that the piles of stone there were raised over the slain, in those great battles which occurred, on the plain, between the Britons and Saxons ? rather than being Druid temples.

origin. The customs of early *Patans*, and neighbouring Siberians, were probably similar.

As regards *Cromlechs* I find there is a two-fold supposition: that they were places of sepulture or altars; or mid-way, first sepultures, and afterwards altars. In Denmark they would seem to have been monuments raised over the burial places of kings. In Anglesey they are supposed to have been altars; or even a sort of platform, from which the Druids addressed an audience. I find moreover that the *Kist-vaen* and *Cromlech* had some similarity; so that the words came to be used interchangeably. But the *Cromlech* is open at the sides and the top, supported by pillars; while the *Kist-vaen* was closed at the sides, and more like a chest. These last seem to be the predominating form in the Carnatic; only it does not appear that the *Kist-vaens* were subterranean. But further there is a singularity connected with the inquiry, and one which had not attracted my attention, until drawn to it by the present subject. I quote from the Ency. Britannica, *Art.* Anglesey. "*Bod-drudan* or the habitations of the Druids, *Trer Beirdd*, or that of the bard, and *Bodowyr*, or that of the priests, are all of them hamlets, nearly surrounding the seat of the chief Druid. At the last is a thick *Cromlech* resting on three stones." I was previously aware that the *Pali* and Sanscrit word, for knowledge, wise men, and wit or wisdom was found in Saxon; but I did not before know that it entered the ancient British tongue. Here however we find the word, and as if it were synonymous, or the same, with our common word *abode;* which I doubt. I will not assert, but I suspect strongly, that the one almost universal religion of *Buddha* (or the sage) was found among the Druids. *Bodowyr* I take to be the old British of the word *Bóddar*, as the *Bauddhas* are usually termed in Tamil.

In this paper it is not my intention to draw any positively final conclusions; but merely to offer data and suggestions, tending to final results.

In so far as any of the remains in question may be deemed Patan in character, we may possibly trace them up to the first incursion of the *Moghuls* from Delhi, which took place south of the *Krishna* river A. D. 1312. They proceeded by way of Mysore; and *Madura* was captured by them A. D. 1324. They were driven back 40 or 50 years afterwards, by *Campana-udiyar* a Mysore chieftain; and, as his interposition is recorded as occurring at Trichinopoly, it is to be inferred, that their retreat was by way of the modern *Carnatic*. Very

few of them returned; many of them left their bones by the way; and it is an open question whether some of the sepulchres discovered were not those of that predatory horde; their plunder, in some cases at least, would be buried with them. During the lapse of four or five centuries, customs may have been altered; if not, at *Uttra-Mērur* (that is in vulgar spelling, *Ootramaloor*) a great action was fought between Mahomedans and Hindus, the former under the command of David, or Daoodkhan: hence possibly the caves in that neighbourhood.

As regards *Paduvūr* were my passing conjectures before offered correct, that might explain some things there. It has occurred to me however since, as an objection, that the construction of the caves imply art and labour; such as would not be bestowed for remains deemed no better than those of dead dogs. And the statement of the 3d translation that those places were tombs, carefully prepared for their ancestors by the *Jainas*, may possibly best remain undisputed.

If there be any weight in the conjecture, that the old Druids were professors of the Bauddhist religion, then we could trace a relation between both *Kist-vaen* and *Cromlech* of western countries, and the like remains in the Carnatic. The slight analogy is I fear not solid; especially considering the strong objection arising from the fact that the Druids offered human sacrifices: any cruental sacrifice whatsoever being abhorrent to the spirit of the Bauddhist system.

An indication already given may here be somewhat developed. When the *pauranical* accounts of the Hindus close, the ascendancy of barbarous races is mentioned. Sir W. Jones gives the names *Abhira Gardabhin, Canca, Yavana, Turushcara, Bhurunda, Maula.* Wilford gives, *Abhiras, Sacas, Tushcaras, Yavanas, Maurundas, Maunàs,* and *Gardhabinas;* and southern Tamil MSS. (as stated by me in Or. Hist. MSS. vol. 1, p. 247,) give *Abiral, Gardhabiyal, Buvathiyal, Yavanal, Maruntiral,* and *Mavunal.* Now of those names, the *Abhiras* are probably *Affghans,* the *Sacas* are *Scythians,* i. e. Siberians, the *Tush-caras* Parthians or Turcomans, and the *Marundas,* or *Maunas,* or *Mavunal,* most probably Huns. It is now some eleven years ago that I read a little Tamil book prepared by the Rev. B. Schmid for a seminary; and I found him stating, from German authorities, that the Huns had ravaged India, as well as other countries. I have very recently conversed with Dr. Schmid on the subject; and I believe that there are many German works that may

throw light on the emigration of people from east to west. Wilford considers the *Marundas*, or *Maunas*, to be Huns. The Tamil has no aspirate, and *Mavunal* may be (without the *sandhi*) *Mā-Unal* the great Hun people. The *Abhiras* are sometimes considered as equivalent to *ar-viral* six fingered people; and tribes so distinguished are said to have been known. A field wide enough is certainly opened; but if the Celtae were known in lesser Asia by the name of Titans and Sacks, and as the Cymri in Wales, that alone is almost sufficient to throw light as to the existence of Cromlechs in the Carnatic. For the Sacks were doubtless a branch of the Sacae or Scythians (not descended from Gomer, but closely related), then it may follow that the Danes and Cymri, and Scythians had customs in common: the use of the Cromlech being one of them. And that the Sacae, or Scythians, penetrated through the length and breadth of India seems more than probable. With respect to the Huns, I am not at all clear in my perception as to their entry into India; unless it were that class of them residing north of Persia. I should be glad if this paper might meet the eye of Dr. Schmid, now on the Neilgherries, and induce him to favour the Journal with a paper on the subject of their connexion with India, if he deem the matter of sufficient consequence.

I have yet a little to add which must be somewhat of a discursive character. Several years ago when I was in the habit of receiving periodicals direct from England, there was a paper in one of them, in the shape of a review, which interested me. It traced the passage of Bauddhism into the north of Europe; dealt in legends of *Thor*, *Woden* (Buddha) and on Runic inscriptions; one in particular. Had it not been my own I should have taken notes; but thinking it always available it has come not to be so, being either mislaid or lost. My memory however serves in one point, sufficient for the present purpose. There was a Siberian legend quoted, which though under different names, I at once recognized as being identically the same with the somewhat ludicrous one, given from the Mackenzie papers, in this Literary Journal,* vol. 7, p. 12, *Agastya* figures in that legend.

* I take occasion to remark, by the way that the mounds of scoriae noticed by Captain Newbold, and supposed by the Editor to have some possible relation with the hillock of pebbles in the Carnatic, were probably the burnt bones of the vast multitudes who fell in the wars between the Dekhini Mahomedans, and the Vijayanagarans. Ferishsta speaks of piles of heads, in their neighbourhood. It is not impossible that in other places indicated, vol. 7, p. 132, the heaps may be the burnt bodies of *Bauddhas* or *Jainas*, for a connection with the *Bauddhas* is intimated by the names given; and a sufficient number of them were killed in the times of persecution. Besides some of the localities are those of great battles.

Now *Agastya* was by common consent once a *Bauddhist;* but, with some marvellous accompaniments, was again born as a Brahman. In the Siberian tale one of the Bauddhists performed the part of *Agastya*. The occurrence of a like legend, in places so widely apart as Siberia and the Carnatic, argues intercommunication somehow or other. In some still lighter and more discursive papers, I have met with essays, on popular superstitions of the northern nations. The position of the writer, following the late Sir Walter Scott, is that the popular mythology of a remote age, becomes, under a change of religion, the remnants of superstitions, fairy tales, and tales of the nursery. I was not before prepared to find the *Devergar* so well known in Hindu history, in the *Dwergars* of Scandinavia; still less in the dwarfs and fairies of Europe. And much less was I prepared to find that the legend of *Agastya* above adverted to had passed into Europe; and, by the process indicated, lives in the nursery tales of Tom Thumb, and Jack the Giant Killer. Such however, very probably, is the case. *Agastya* is always stated to be small of stature. The reverse of the proverb "stories never lose by carrying" seems to have occurred, in the progress of mythology north and west, into the tales of the nursery. There are however additions in such tales, as to variety of incidents.

That languages will show an affinity between the east and the west has long been my opinion.

The affinity is particularly great between the *Pāli,* and old *Saxon.* But, on this point, I must not now enlarge.

In looking for the periodical containing the Siberian legend *quasi* of *Agastya*, though I found it not, yet I met with another number, containing an article on old Northern History and Antiquities, with reference to Proceedings of the Royal Society of Northern Antiquarians at Copenhagen, with one or two extracts from which I purpose to close this paper. I must pass by matter of only general interest, and the five great streams of population which flowed westward, or north-westward—to wit, the Iberians, the Celts, the Teutones, the Sclavonians, and Finns—and all connected matter, in order to come at the *Runic* inscription at Hoby near Carlshamn in Sweden: the oldest of the kind in the north; which, after many failures, is at length I *hope* rightly translated. The first portion is,

HILDEKIN received the kingdom
GARD hewed out———
OLE took the oath
ODIN consecrate these *runes*.

Now Gard or rather Gardhr, the name of a scald and warrior, is indeed but a faint indication, but it is the root of the word *Gardhabhina*;* and, if the name indicate the race, the ancestors of the Danes had something to do with India, for Hildekin was otherwise Harald, a King of Denmark. The third verse is more definite.

Odin and Frey
And the *Aser* race
Destroy—destroy
Our enemies.

The *Aser* race would seem pretty evidently to be the same with the *Asuras* of *Hindu* fable. I am aware that the combats of the *Surs* and *Asurs* have been supposed to have taken place in some super-terrestrial region. But I cannot think so.† I believe they were flesh and blood mortals, like ourselves.

The quotation which I next make bears more immediately on the leading subject of the present paper. It is as follows:

" The Scandinavian antiquities, whether belonging to the ancient heathen period, or the earliest Christian times, bear so great a resemblance to those of Britain and Ireland that, when accurately examined and described, they mutually explain, and elucidate each other. This is especially the case with the Pagan stone circles, stone altars (cromlechs?) barrows (topes? or kist-vaens,) &c. The most ancient of such British erections are generally ascribed to the Druids; but it is very possible that these sages of the olden time, had more in common with the *Drutts*‡ or *Drotts* of the North, than a mere similarity of name, or than the rearing of such monuments. The stone erections in the Scottish, Orkney, and Shetland Isles, show themselves to be purely Northern, or reared by people of decidedly Northern extraction."—*Report of Roy. Soc. of Northern Antiquities. Introd. p.* 9—10.

Though I have been more verbose than I purposed to be, yet the subject, I am persuaded, is not exhausted. Good drawings or descriptions of old remains, and the same classified, as to kind, and apparent antiquity, are wanted on the one hand; and if through the

* The Gaudari were a Scythic people; precise agreement in orthography, from different hands, cannot be expected.

† In the Cyropædeia of Xenophon we find the *names* plain enough *κατεστρέψατο δε Σύρους, Ασσυρίους κ. τ. λ.* Book I. Introduction.

‡ Query—if the classic *Druidae* be not a corruption of this term?

channel of the Munich Academy, or any other and nearer source, the results of inquiries by German Philologists and Antiquaries, as to the emigrations of ancient people, could be brought to bear on the other hand, it is possible that some further light might beam on the remoter period of Peninsular history.

ADDENDUM.

It may be expedient to note that the foregoing paper was prepared, and transmitted to the Editors, antecedent to the appearance of No. 32 of the *Journal.* The reference to Scythian Invaders of India, and to matters pertaining to the *Bauddhas*, are consequently distinct and independent statements; not derived from Captain Congreve's valuable series of papers in that number. I think those papers throw light on some passages of the Congudēsa Rájákal; though it is not quite convenient to enter on any detail, in connexion with the present already lengthened essay.

V.—*Report of the Sub-Committee of the Literary Society appointed to examine the Collection of Native MSS. committed to the Society's charge by the Government of Fort St. George.*

The duty on which the Sub-Committee have now been employed arose out of the application made by the Society on the 23d September, 1843, for certain MSS. in the vernacular languages which it was understood from one of our Members, Mr. C. P. Brown, (then Joint Secretary of the Society in the Asiatic Department,) were lying unnoticed and unarranged in the Library of the East India House.

The Honorable the Court of Directors were graciously pleased to comply with the request as stated in their despatch of the 6th March, 1844, communicated by the Chief Secretary on the 3d May following. The MSS. themselves contained in 11 cases arrived in the "*Duke of Cornwall*" in the month of August and were safely deposited in a part of the large room devoted to the College

Library, together with the portion of the McKenzie collection formerly received from Calcutta which had previously been deposited in the rooms occupied by the Library of the Society.

On the 27th January our associate Mr. C. P. Brown made an unreserved tender of his own unrivalled collection, and proposed that it should be incorporated with those already deposited in the College, and that the whole should be placed under the charge of the Native Librarians hitherto in his own service. This munificent offer was accepted and the Committee having applied to Government for the necessary authority to employ these men, the sanction of the Supreme Government was obtained for a monthly expenditure of 51 Rupees, on that account.

The Government at the same time called upon the Society to furnish a catalogue raisonné of the collection similar in character to that of the McKenzie MSS. drawn up by Professor Wilson, and farther to report upon the estimated value of the whole collection. This call was repeated sometime afterwards but with special reference to Mr. Brown's collection alone.

It was for the purpose of considering how this information was to be supplied that your Sub-Committee was appointed at the Meeting of the 9th September, 1845.

After having assembled repeatedly at the College and made such an investigation as was at present practicable, we have resolved to submit the result of our inquiries, imperfect as they are, reserving farther details to a date when they may be more completely within our knowledge. And at this stage we desire to offer our best acknowledgments for the aid and information we have at all times received from Mr. Brown.

The MSS. now united into one Library comprise 5 collections:

1. That recently transmitted from the East India House.
2. Mr. Brown's.
3. That portion of the McKenzie collection received from Bengal.
4. The old Library of the College of Fort St. George.
5. The collection of the Literary Society.

The whole five collections thus brought together and lodged in the College are composed of 5,751 Volumes, of which 2,735 are in Sanscrit, and 3,016 in the modern vernacular languages, according to the following Tabular Statement.

Collections.	Sanscrit Languages.																		Vernacular Languages.																Total Vernacular Works.	Total Vernacular and Sanscrit.
	Telugu Characters.		Canarese do.		Grantham do.		Tamil do.		Déva Nàgari do.		Mahratta do.		Malayàlam do.		Oriya do.		Bengali do.		Total.	Telugu.		Canarese.		Tamil.		Malayàlam.		Oriya.		Burmese.		Bengali.		Mahratta.			
	Cadjan.	Paper	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.		C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.		
Mr. Brown's Collection...	821	452	0	0	0	0	0	0	0	16	0	0	5	0	0	0	1	4	1,299	714	402	0	18	0	0	3	0	0	0	4	0	0	0	0	0	1,141	2,440
College do.	34	28	0	0	10	12	0	0	0	22	0	0	0	0	0	0	0	0	106	20	17	3	3	81	19	0	0	0	0	0	0	0	0	0	25	168	274
E. I. House do...	272	0	446	0	373	0	0	0	165	0	0	0	41	0	7	0	0	0	1,304	108	0	528	0	56	0	11	0	9	0	90	0	0	0	0	0	802	2,106
McKenzie do....	0	0	4	0	0	0	0	0	2	0	0	0	2	2	2	0	0	0	12	125	198	137	0	256	70	15	0	19	0	0	0	0	0	0	81	901	913
Literary Society do.	0	0	0	0	16	0	0	0	0	0	0	0	2	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
	1,127	480	450	0	399	12	0	0	167	38	0	0	50	2	9	0	1	4	2,739	967	617	668	21	393	89	29	0	28	0	94	0	0	0	0	106	3,012	5,751

The Sanscrit portion contains two complete copies (besides many detached portions) of the Vedas, one on palm leaves in the Grantham character, the other on English paper in the Telugu character.

A considerable number of volumes principally from Mr. Brown's collection, are written on English paper and bound as English books, some of which are in Sanscrit, some in the Telugu, and others in the Canarese languages.

To make a catalogue raisonné of these numerous works, is an undertaking that far exceeds the unaided means of this Society. The persons in charge of the collection are mere custodians who are able to do little more than read the titles of the works. Indeed to frame any thing like a catalogue raisonné that would prove suitable to the European reader is a task beyond the powers of any Native. The members of the Sub-Committee would therefore have had themselves to undertake the labour of examining and abstracting the contents of each MS. to enable them to furnish such a list as the Government desire, and this it must be evident requires more time and exertion than they could possibly afford for the purpose. As a first step however to such an object they directed the Librarians to prepare a new list of the works according to their different subjects, of which a programme was furnished for their guidance, but after much delay and raising many difficulties they have totally failed. An alphabetical list of his own collection was framed many years ago by Mr. Brown, and under his directions it had been extended to the other collections, not however in such a manner as to show the proportion belonging to each, and as there are many duplicates and frequently several copies of the same work in the same collection, this document necessarily affords but an imperfect idea of the whole. Another statement is now in preparation distinguishing the relative contents of each collection, which will show not only the number of duplicate works in the same collection, but likewise the number of copies in all the collections.

In the catalogue prepared by Mr. Brown the whole collection is arranged alphabetically and numerically with Indexes framed for the most part in the language in which the books are written. These lists may merit translation into English, and in their present state are probably sufficient to serve the purposes of such native scholars as may require the books.

An abstract of these catalogues will be found in the enclosure

No. 1 accompanying this Report and a translation of the preface to Mr. Brown's original Telugu Catalogue, for which the Sub-Committee are indebted to that Gentleman, and which shows the manner in which these lists have been prepared, forms enclosure No. 2. A third statement (enclosure No. 3,) exhibits the books presented by Mr. Brown distinguished from those contained in the other collections under their several heads.

The McKenzie MSS. have been partly and the Sub-Committee think sufficiently described by the Rev. Mr. Taylor, whose catalogue has been published in the Society's Journal.

A general notice of the whole of the materials collected by the late Colonel McKenzie was likewise published by Professor Wilson in Calcutta in 1828, in which the specification of some volumes (under 200) of the works afterwards forwarded to this Presidency was included.

Mr. Brown's collection is accompanied by a catalogue framed under his own directions nearly twelve years ago, and subsequently extended to the other collections under consideration. An explanation of this list, as has been stated above, is contained in enclosure No. 2.

The collection received from the E. I. House has not yet been fully examined. It seems to have been collected by various persons and at different times. A large proportion of it, as appears by the Honorable Court's despatch, was included in the collection of the late Dr. Leyden, whose MSS. were purchased by the E. I. Company. Many of them are without title-pages, ill written and in bad condition. They appear from superscriptions on many of the volumes in the Bengali character, to have travelled in the first instance to Calcutta and thence to have been transported to London, there to have lain unnoticed for many years. A large proportion (about 900 Volumes) are in the Canarese character but others are written in Telugu, Tamil, Malayalam, Orya, Devanágari, and Burmese.

The College collection was never very extensive, and has suffered greatly in the Hindu portions from the dishonesty of a former Bramin Librarian.

The collection of the Literary Society has likewise been much curtailed in extent, as appears from a useful catalogue in the Society's records containing a succinct and clear account of each work drawn up many years ago by the brother of their Librarian, Mr. Bantleman.

The Sub-Committee will now advert to the means that have suggested themselves for amalgamating these several catalogues as far

as they go, and for completing them where they are defective in such a manner as to supply the desideratum of a catalogue raisonné required by Government. For this purpose they would recommend that at least *two* Pundits acquainted with the various languages in which the MSS. are written should be attached to the Library till such time as the whole have been examined, and that they should be placed under the superintendence of a European Officer qualified to direct their researches and to exhibit the results in an English dress —the cost of such an establishment on the most economical scale would be as follows :

	Rups.
Superintendent, - - - - - - - - -	100
2 Pundits at 50 Rupees, - - - - - -	100
English Writer, - - - - - - - -	50
	250 per mensem.

It is probable that a suitable person to direct these proceedings may be found without much difficulty among some of the young Officers who have devoted their attention to the study of the Native languages to whom such an employment might be made both a reward for past industry and an incentive to the cultivation of talents already displayed. The arrangement might be sanctioned at first for a period of two years, during which time the Superintendent should be required to furnish periodical reports from which a judgment could be formed of the value of the results and of the propriety of continuing the examination to a conclusion.

The next point to be considered is the safe custody of the collection which at present is lodged in the same building as is the College Library but under distinct guardians. These are the individuals originally in the service of Mr. Brown, the expense of whose salaries has already received the sanction of Government as per margin, besides whom Mr. Brown still maintains two peons at his own charge for dusting and moving the books. The Sub-Committee have found the three individuals above mentioned to be very inefficient and they are of opinion that better qualified persons might be found for the duty hereafter. But at present they think that two of them should be retained on account of their practical acquaintance with the volumes, the result of long association with them, and that the third should be discharged and his salary devoted to the support of the two Peons or Lascars employed by Mr.

	Rs.
Soorap Sing, -	25
C. Kistama, -	14
Narrainsawmy, -	12
	51

Brown, thereby relieving that Gentleman from the charge still voluntarily incurred by him. The whole might with advantage be placed under the charge of the Secretary to the College as a temporary expedient, who should be considered responsible for the preservation and safety of the collection, and should see that the volumes are frequently counted and their condition examined by his establishment.

But this arrangement which is only supported by considerations of present conveniency, should ultimately give place to one more calculated to render the MSS. accessible to persons able and desirous to make use of them. Overtures have been made to the Literary Society for the formation of a Public Library, with which, should the plan succeed, the collection might be incorporated or it might hereafter be lodged in the Library of the University, (whenever one is formed) as being more particularly a Government Institution. But in every case the greatest precautions must be taken to prevent the MSS. being pilfered and carried away, a fate to which they will be very liable from the value they possess in the estimation of the Native community. As an immediate precaution they might be stamped or sealed with a Government chop, but this could only be done with such as are written in paper. The Sub-Committee are not aware of any means for impressing a permanent mark on the cadjans which form so large a proportion of the collection.

With regard to the value of the collection the Sub-Committee have no hesitation in stating that as a Library of Southern Hindoo Literature it is unrivalled. As regards Sanscrit Literature more especially Law and Grammar, it cannot compete with some of those to be found in Calcutta, but certainly no collection in the Peninsula can approach it. As a whole, it far excels all known collections in extent and probably none has ever existed, so distinguished for the variety and general interest of its contents. The Libraries of Native Princes and of Mat'hams or Colleges, usually consist for the most part of works in Sanscrit only, and if vernacular compositions are admitted, they are confined to the dialect of the district in which the collection has been formed. Religious bigotry excludes every work deviating from the particular creed of the founders and the lighter literature which the learned despise, but which the people value, finds no place in institutions of such pretension.

But the present collection formed by European scholars, embraces every language, every creed, and every class of literature.

To estimate in money the value of objects, which have no certain marketable prices, but of which the cost fluctuates with the labour of transcription, the wants and fancies of purchasers, actuated sometimes by religious zeal, sometimes by desire of amusement, sometimes by curiosity, is almost impossible. Mr. Brown estimates the actual outlay made by him on his own collection at above 30,000 Rupees. The Committee consider this to be a fair and moderate valuation, and the remaining volumes may be taken at a somewhat smaller sum. On the whole they consider that they are within the mark in stating the entire collection to be worth about 50,000 Rupees. It must also be borne in mind that the waning encouragement of royal and noble patrons of literature in the present state of India, has tended to lessen the supply of MS. copies of vernacular compositions and that they may be expected to become scarcer and scarcer every day. This enhances the value of the less known works and renders their preservation a matter of the greater interest and importance.

APPENDIX No. I.

An Abstracted List from the Telugu Lists of the Oriental Manuscripts contained in the several Collections at the College.

BROWN'S COLLECTION PAPER.

Sanscrit Works.		*Telugu Character.*
Vèdas.	From No. 1 to 24....	No. 130.—Unbound Sections, except 2 Numbers bound.
,,	,, ,, 1 to 59....	
,,	,, ,, 1 to 33....	
,,	,, ,, 1 to 14....	
Mantras.	From No. 1 to 137..	Bound, contains 720 Mantras, works and Mantras.
Vèdànta.	From No. 441 to 446..	No. 6.—Bound.
Purànas.	From No. 351 to 429..	No. 79.—Bound, each Volume containing a single work or more.
Skànda Puràna.	From No. 618 to 633..	No. 16.—Bound.
Kávya, Nátaka, Alankáras.	From No. 451 to 538..	No. 88.—Bound.
Vyákarana, Ch'handa, Nighantu.	From No. 600 to 617..	No. 18.—Bound.
Telugu Works.		*Telugu Character.*
Kávya, Nátaka, Alankára Purána, Vaidya Works.	From No. 1 to 333........	Bound, contain 700 works.
Lists and Indexes.	From No. 401 to 419.......	No. 19.—Bound.

Telugu and English. *English and Telugu.*

Dictionaries, Grammars, &c. From No. 371 to 389.....No. 19.—Bound.

Canarese Works. *Telugu Character.*

Various Works. From No. 341 to 358.............No. 18.—Bound.

BROWN'S COLLECTION.

PALM LEAVES.

Sanscrit Works. *Telugu Character.*

Mantras or Magic and Secret Rites. } From No. 1 to 165 ...... } No. 165. Contain 2320 Mantra works and Mantras.
Vèdànta. From No. 401 to 545......No. 145.—Contain 480 works.
Puràṇas. From No. 201 to 400......No. 200.—Contain 450 works.
Kàvya, Nàtaka, Alankàras. } From No. 601 to 766..........No. 166.—Contain 360 works.
Jyòtish. From No. 551 to 582........No. 32.—Contain 70 works.
Vaidya. From No. 901 to 925........No. 25.—Contain 40 works.
Vyàkarana, Khanda, Nighantu. } From No. 801 to 878........No. 78.—Contain 140 works.
Various Works. From No. 1001 to 1015. ..No. 15.—Contain 110 works.

Telugu Works. *Telugu Character.*

Vèdànta. From No. 601 to 643......No. 43.—Contain 150 works.
Kàvya, Puràṇas. From No. 1 to 553...No. 553.—Contain 1090 works.
Jyòtish. From No. 721 to 755.......No. 35.—Contain 70 works.
Ganita. From No. 701 to 711.......No. 11.—Contain 50 works.
Vaidya. From No. 761 to 841.......No. 81.—Contain 270 works.
Ch'handas, Nighantus. } From No. 651 to 694..No. 44.—Contain 80 works.
Various Works. From No. 842 to 913.No. 72.—Contain 72 works.

BROWN'S COLLECTION PAPER KASY FORM.

Sanscrit Works. *Telugu, Nagri, and Mahratta Characters.*

Vèdànta. From No. 951 to 958.....No. 8.—Contain 40 works.

Sanscrit Works. *Telugu and Nagri Characters.*

Puràṇas. From No. 959 to 972......No. 14.—Contain 16 works.

Sanscrit Works. *Nagri Character.*

Kàvya, Nàtaka, Alankàras. } From No. 973 to 975... ...... No. 3.—Contain 3 works.

Sanscrit Works. *Telugu, Nagri, and Bengal Characters.*

Tarka, Vyàkarna. } From No. 976 to 982...........No. 7.—Contain 23 works.

MACKENZIE COLLECTION PAPER.

Telugu Works. *Telugu Character.*

Various Works. From No. 501 to 697...... } No. 197.—Bound, contain one or more works in each No.

Tamil Works. *Tamil Character.*

Various Works. From No. 784 to 850...... } No. 67.—Bound, contain one or more works in each No.
Do. From No. 959 to 963. No. 5.—Bound, do. do.

Canarese Works. *Canarese Character.*

Various Works. From No. 701
to 766......No. 66.—Bound, contain 66 works.

Malayalim Works. *Malayalim Character.*

Nos. 957 and 958..............Bound, 2 works.

Mahratta Works. *Mahratta Character.*

Various Works. From No. 851
to 956....No. 106.—Bound, 106 works.

MACKENZIE COLLECTION PAPER.

PALM LEAVES.

Canarese Works. *Canarese Character.*

Various Works. From No. 1801
to 1935......No. 135.—135 works.

OLD COLLEGE COLLECTION PAPER.

Sanscrit Works. *Telugu Character.*

Various Works. From No. 701
to 728....No. 28.—Bound, except 2 Nos.

Sanscrit Works. *Grantham Character.*

Various Works. From No. 729
to 740.......No. 12.—Bound, except 2 Nos.

Sanscrit Works: *Nagri Character.*

Various Works. From No. 741
to 762......No. 22.—Bound, except 5 Nos.

PALM LEAVES.

Telugu Works. *Telugu Character.*

Various Works. From No. 484
to 500....No. 17.

Canarese Works. *Canarese Character.*

From No. 698 to 700..............No. 3.

Tamil Works. *Tamil Character.*

Various Works. From No. 767
to 783..........No. 17.

Burman Works. *Burman Character.*

Names not known. From No. 2381
to 2474......No. 94.

COLLECTION RECEIVED FROM THE EAST INDIA HOUSE.

PALM LEAVES.

Sanscrit Works. *Telugu Character.*

Various Works. From No. 1051 to 1350... } No. 300.—Contain many works in each No.

Sanscrit Works.		*Canarese Character.*
Various Works. From No. 1351 to 1700......	No. 350.	Some of these Nos. contain many works in each.
Do. From No. 2331 to 2363	No. 33.	

Sanscrit Works.	*Grantham Character.*
Various Works. From No. 1701 to 2099......	No. 399.—Contain many works in each No.

Sanscrit Works.	*Nagri Character.*
Various Works. From No. 2101 to 2267.......	No. 167.—Each No. contains a single work or more.

Sanscrit Works.	*Malayalim Character.*
Various Works. From No. 2281 to 2330......	No. 50.—Some numbers contain a single work in each.

Sanscrit Works.	*Odra Character.*
Various Works. From No. 2365 to 2373......	No. 9.—Contain 9 works.

Telugu Works.	*Telugu Character.*
Various Works. From No. 1001 and 1113....	No. 113.—Each No. contains a single work or portion of a work.

Canarese Works.	*Canarese Character.*
Various Works. From No. 1201 to 1733......	No. 533.—Each No. contains a single work or portion of a work.

Malayalim Works.	*Malayalim Character.*
Various Works. From No. 1951 to 1969.........	No. 19.—Contain 19 works.

Tamil Works.	*Tamil Character.*
Various Works. From No. 1981 to 2373.....	No. 393.—Each No. contains a single work or portion of a work.

Odra Works.	*Odra Character.*
Various Works. From No. 2475 to 2502.....	No. 28.—Each No. contains a single work or portion of a work.

APPENDIX No. II.

Translation of the Telugu Introduction to a Catalogue of Telugu and Sanscrit Manuscripts, in the possession of Mr. C. P. Brown, *Civil Service.*

Rajahmundry, *November*, 1834.

1. The manuscripts are divided first into Sanscrit and Telugu, each of these classes is divided into ancient and modern copies—these four series of figures are used.

2. The modern copies are those prepared under Mr. Brown's directions in the shape of English volumes properly bound. All the rest whether on paper or on palm leaves are described as ancient.

3. Some volumes contain four, five or ten different books, but each volume is considered only as one item. Thus each of the five or ten books bear the same number.

4. Some of the ancient copies are marked *A* that is, (asamagram,) incomplete.

5. There are thus four catalogues for the four classes each of which is arranged numerically. It was found difficult to place each branch of learning in a separate catalogue, but this has been done as far as was practicable and afterwards one consecutive numeration was applied to all. Still the four classes remained separate.

6. And where one class terminated, a few numbers have been left unoccupied for such books as might be hereafter met with appertaining to this class.

7. Some ancient books particularly those written at Benares, are on loose leaves of paper tied up in cloths which are called Dafters. These were at first classed separate from the rest, and have not yet been all brought under the general class being marked "Dafter No. 2, &c." And they are numbered under the ancient series.

8. After the four lists were completed two alphabetical lists were prepared one to each language.

9. Each of the alphabetical catalogues has two columns, the first giving the ancient articles, the second the new ones. For instance Vasu Charitra, we find in the first column Nos. 15, 63, which denote two books in the antique (or native) form, and in the second column number 85 denotes that there is also a copy written in the European form, that is in a bound volume.

10. But it must not be imagined that the new copies are mere transcripts of the old ones, on the contrary most of the new copies were made from books lent to me and which are not now in the Library.

11. Further: very few of the ancient manuscripts are complete while an incomplete book rarely occurs among the new copies and only among unimportant works, for the new copies were each grounded on five or six copies lent me.

12. It is impossible to procure one uniform ancient copy of the Telugu Mahabharatta which is found only in separate volumes.

But my modern copy is grounded on numerous ancient ones, at least eight copies having been procured of some parts and twelve copies of others, thus my collated copy is at least equivalent to eight complete ancient manuscripts.

13. Sometimes Sanscrit books are found in the same volume with a Telugu poem. In such cases the volume is only numbered as one, and is placed under one list, in the other list there is a reference to it, as, vide other catalogue.

14. Some books have two titles, the whole details are therefore given under one name to which there is a reference under the other (instances are given).

15. It is the custom in India to call the various portions, books, or cantos of a work by separate titles, thus the "Yuddha Canda" *i. e.* "The Battle," is in truth "the sixth book of the Ramayanam" as it would be called in Europe. This is inexpedient; accordingly all such subordinate names are omitted in the alphabetical catalogue: but will be found at full in the numerical arrangement.

16. It is also the mode to prefix a title (as Holy Bible,) for the one name Bible. Thus "Sri" is prefixed to the names Bhagavatum and Ramayanam; this is not expedient and I have not adopted it in the alphabetical arrangement, I have placed these names under their respective initials not under S.

17. Yet some portions are very generally classed as separate books, and accordingly I have allowed the celebrated Bhagavat Gita with its various commentaries to stand as one work instead of classing it under the Maha Bharatum to which it originally belonged. Thus also the Kasi Khandum is placed under K. instead of being included in the "Scanda Purana" under S.

It is difficult to state the exact number of books in the Library in round numbers; it may be stated, that there are about 900 separate ancient volumes of Sanscrit, and about 360 newly written volumes. Some works extend to ten volumes some to twenty. Among the rest there is a complete copy of the Vedas, and of seventeen Puranas with fragments of the 18th called Bhavishya. The total of separate items is about 4,000.*

It is yet more hard to classify the books rigidly according to titles.

* This includes only my private collection: which after my return to India was somewhat increased.

Sometimes we find the comment classed separate from the text and bearing a separate title. Thus the chief commentary on the Bhagavata is called Sri Dhariyam, as being written by Sri Dhara Swamy and one on the Ramayanam is called Tirthiyam.

Some treatises on Telugu grammar are written in Sanscrit, but are classed under Telugu, because appertaining to that language.

There are no printed books in this catalogue. The printed Sanscrit and Telugu books being placed in a separate list, viz., that of my English library.

There are some trifling miscellaneous articles which did not deserve a place in the alphabetical catalogue, such as medical receipts which were found written at the end of more important books, likewise modern compositions, as my translations of parts of the Bible and copies of some trials and Telugu letters. These are placed at the close of the alphabetical catalogue in several lists, as medical fragments, poetical fragments, fragments on law, &c. &c.

These catalogues were framed in the year 1834, when I was acting Judge at Rajahmundry.

The present remarks are drawn up both in Telugu and in English by me as a key to the catalogues.

The entire library cost me about twenty-four thousand Rupees, the greater part of which was laid out in pay to the learned Bramins, who under my directions framed commentaries on the Telugu poems, and also the copyists who assisted me in my Dictionary.

It requires a little experience to use the present catalogue; thus under the title Bharata, we find the name Annsasanicam which is marked so as to show that there are no MSS. of that poem. But a little lower down we find a complete MSS. of the entire Mahabharat, in the English form, which not only contains the Annsasanicam (or eleventh book of the Bharat) but exhibits the various readings found in nine collated manuscripts.

(Signed) C. P. Brown.

Postscript.—For four years after my return to India, 1838, 39, 40, 41, my establishment of Writers, with bills for paper, printing, and binding native books cost me just about two hundred Rupees a month. During several months, the expense was double that amount.

(Signed) C. P. Brown.

APPENDIX No. III.

Statement of Manuscripts now placed in the College Library, under the charge of the Literary Society: distinguishing those presented by Mr. C. P. Brown, *from those which formerly belonged to other Collections.*

	Brown's Library.	Others.	Total.
I. Sanscrit.	Vols.	Vols.	Vols.
In Telugu Characters on Palm Leaves,	798	300	1098
— Canarese do.	15	384	399
— Grantha do.	0	399	399
— Devânagari do.	0	167	167
— Malayalum do.	5	45	50
— Odhra do.	0	9	9
Totals..	818	1304	2122
II. Sanscrit in Bound Volumes.			
Telugu Character, bound 216 not 33,	249	28	277
Do. Benares form,	25	0	25
Do. in Grantha Character,	0	12	12
Do. Nàgari,	2	22	24
Do. Bengali,	5	0	5
Totals..	297	63	360
III. In Telugu Language.			
Palm Leaf Volumes,	710	259	969
In Canarese do.	0	639	639
— Do. Caditams,	0	28	28
— Malayalum Palm Leaves,	3	16	19
— Tamil,	14	379	393
— Burmese,	21	73	94
— Odhra,	0	28	28
Totals..	748	1422	2170
IV. Volumes on Europe or other Paper usually bound in Leather.			
Telugu,	527	209	736
Canarese,	29	69	98
Tamil,	24	0	24
Do. Miscellaneous,	0	89	89
Malayalum,	0	2	2
Mahratta,	0	104	104
Do. in Nagri Character,	0	12	12
Miscellaneous,	25	0	25
	605	485	1090
Grand Total..	2468	3274	5742

VI.—*A Supplement to the Six Reports on Mackenzie Manuscripts (heretofore printed in the Madras Journal of Literature and Science) by the Rev.* William Taylor.

INTRODUCTORY NOTE.

Causes beyond my control prevented the publication of some of the Reports on my Analysis of Mackenzie manuscripts, till long after they had been sent in; and the preparation of following matter consequently lingered in my hands: it being by no means certain that the documents were acceptable. At length a remaining portion of the sixth Report was called for; and was published. As I had made it known that further materials remained behind, I was induced to have these copied; and, as so much as pertained to Tamil documents only, seemed sufficient for one paper, I have made up this supplement from them alone. There still remains some other portions relative to other languages.

It has always been my wish to see the whole in print, and then to form a summary having reference to the printed pages; to which summary some general conclusions might be attached. Translations of papers, or parts of papers in the most valuable portions would be a very fitting close of the entire analysis. And this plan I had contemplated in the shape of a distinct publication. Experience however has taught me that it could not be undertaken without heavy loss. The cost of publishing in this country is greater than in Europe; the getting up usually inferior; and as few copies can be printed, the price of each copy is necessarily high, and few persons choose to subscribe or purchase. To labor long and painfully, and to find pecuniary loss a result is not agreeable. Hence I prefer to place this supplement, as one more step of progress, at the disposal of the Editor of the *Madras Journal*, &c.; and if permitted to work out my plan to the close it may be well. If not I shall have done as much as adverse circumstances would permit. The absurd condemnation of the Mackenzie manuscripts, by superficial contempt, I regret. They contain some matters of value which, once lost, cannot be retrieved.

A—TAMIL.

A—Palm-leaf Manuscript.

Sambhava Cāndam of the Scanda Purana No. 7.

Yuddha Cāndam of the same No. 8, C. M. 14.

The term *Sambhava* signifies origin, or birth; and is applied, I believe, to the birth of Scanda or *Subrahmanya;* the word *Yuddha* signifies war: but these two books are only two parts, or volumes, in continuation of the same general subject. The two contain six *Cāndams, i. e.* books, or sections with the following titles, to which are added the number of *Padalams* or chapters, and Stanzas in each.

I.	*Utpatti Cāndam*	31	*Padalams*	1785	*Stanzas.*
II.	*Asura-utpatti Cāndam*	44	,,	1936	,,
III.	*Vira Mahendra Cāndam*	21	,,	1163	,,
IV.	*Yuddha Cāndam*	14	,,	3935	,,
V.	*Deva Cāndam*	6	,,	452	,,
VI.	*Dacshana Cāndam*	22	,,	1994	,,

The total should be 11,265 stanzas: but as there is one *Padalam* deficient in the sixth *cāndam:* so the MS. itself enumerates 11,259 stanzas: these are of the difficult measure termed *Viruttam.* The following outline will give some idea of the contents of the different sections.

I. The *Utpatti Cāndam* or introductory section.

1. Invocation to the deity.

2. Plan of the work detailed.

3. On the river, or the Ganges. 4. The inscription, and praise of the neighbouring country. 5. The same, as to the town.

6. Other preparatory matter. 7. Concerning *Cailasa.* 8. On *Parvati.* 9. On *Maha Meru.* 10. Legend of *Cama.* 11. On the discontinuance of *Siva's* penance.

12. Further matter concerning that penance.

13. Relates to the second marriage of *Siva* with *Parvati*, daughter of the king of *Himālaya.*

14. The said king called *Visvacarma*, the artificer of the celestials, and requested him to ornament the said mountain with buildings.

15. Narrates the attendance of *Brahma, Vishnu*, and a great multitude of inferior celestials, *rishis, &c.* at the nuptials of *Siva.*

16. Describes the marriage of *Siva* with *Parvati*, or *Uma*, and their then going away to *Cailasa.*

17. Narrates what is termed the *tiru avatáram* or sacred incarnation of *Subrahmanya. Siva* sent from his frontlet eye six beams, or rayons, of

fire, which entered into a tank called *Saravana-poyikai*,* and there uniting assumed the shape of six bodies.

18. *Siva* formed nine *Sactis* or feminine personifications of his own passive energy, and from them caused nine sons to be born as helpers to *Subrahmanya*. These are the nine *vírâls* or champions.

19. *Siva* and *Uma* went to the *Sarvana* pool, took thence the six infantine forms, moulded them into one body, having six heads and twelve arms, and then carried this child to *Cailasa*.

20. Relates the pastimes of the young *Subrahmanya*, who amused himself by setting the elephants at the eight points, supporting the world, to fight with each other. He also skirmished with *Indra*, who being overcome, mentioned the character of the young warrior to *Vrihaspati*, preceptor of the celestials, who came and paid homage to *Subrahmanya*.

21. *Nareda* performing a sacrifice, out of it proceeded a sheep or goat, which he gave to *Subrahmanya* for a *vahana*, or vehicle.

22. *Subrahmanya* inquired from *Brahma* the meaning of the *Vedas*, and as Brahma could not inform him, he put *Brahma* in prison, and himself undertook to carry on the work of creation.

23. The release of *Brahma*. After long durance *Siva* asked *Subrahmanya*, or *Cumara-svami*, to release *Brahma*, to which the said *Cumara* consented.

24. The celestials making known to *Siva* the molestation which they sustained from *Surapadma*, he gave permission to *Subrahmanya*, to go and make war against the said *asura*.

25. *Subrahmanya* (herein styled *Cumara-vel*) set out with two thousand *vellums*† of gigantic warriors and the nine *vírâls*, or champions, to make war.

26. *Taruca*, the younger brother of *Surapadma*, was met at an illusive mountain named *Krauncha-giri*. *Subrahmanya* overcame and killed *Taruca*, and destroyed the mountain.

27. Concerning *Deva-giri*. In place of the said mountain *Subrahmanya* had another mountain formed, which was termed *Deva-giri*.

28. Concerns the conduct of *Asurendra*. He was the son of the slain *Taruca ;* he went to *Mahendra giri* the residence of *Surapadma*, and reported that his father had been slain by *Subrahmanya*.

29. The journey of *Subrahmanya*. The said *Cumarasvāmi* proceeded to the banks of the *Cáveri* river; passing by the way the (celebrated *Saiva*) shrines of *Gedara*, *Cási*, *Vencata (Tripety) Cālahasti*, *Vālancādu*, *Canchipuram*, *Tirunamalai*, *Nallur*, *Vriddhāchalam*, and *Chitambaram*.

30. From the *Caveri* he went to *Cumarapuram*, and thence proceeded to *Tiru-vāllur*.

* *At Tirtani* near Madras, there is a pool, which bears that name, and with which the usual liberty is taken by describing it as the precise birth place of *Subrahmanya*.

† An indefinite term, vaguely intended to denote a great number.

31. Thence he passed by a dry, hot, and barren land, and met with six sons of *Parasara*, who conducted him to *Tiru-paran-kunru* (or the hill of the heavenly one, an epithet of *Parzani*) which he inspected.

32. Relates to *Tiru-chandipur*. From Pyney the said *Cumara* proceeded to *Trichendur ;* where he met with *Indra*, from whom he inquired the origin and birth of *Surapadma*, and his subordinate *asuras*. The relation is commenced by *Indra* forming the matter of the second book.

II. The *Asura-utpatti-cāndam*, or account of the origin of the *asuras*.

Each *padalam* of this division will not require a minute specification. It is throughout related by *Indra*, in the first person, to *Subrahmanya*. In the early part *Casiyapa* is introduced. It must be remembered that in other books, he is stated to have had two wives, named *Diti* and *Aditi* by whom were produced the *devatas*, or celestials, and the *daityas*, or Titans. In this book he is described as father of the *asuras* by *Surasi*, an obscure female of low, or foreign race, who was instructed by *Sucra*, preceptor of the *asuras*, and by him surnamed *Mayi*, or deceptive one. The eldest born of the sons of *Casyapa*, by *Surasi*, was named *Surapadma*, and other two sons were called *Singhamuc'ha* and *Animuc'ha* (or *lion-face* and *elephant-face*) and with them a vast multitude of other *asuras*. Various minor matters, relative to this illegitimate family, are mentioned. Among other things their departure or separation from their place of birth, and building a new* capital which, in a legendary way, is said to have been effected by *Surapadma* calling *Visvacarma* and giving him directions to build a town. A distinct colony, or nation was thus formed. This principal matter being stated, *Indra* introduces in an episode, an account of *Agastya* having been commissioned to go to the south ; on the way he was resisted by a vast barbarian, huge as a mountain, named *Krauncha*, on whom *Agastya* denounced a curse of becoming fixed as a mountain ; and of being ultimately destroyed by *Cumara* the son of *Siva ;* explaining a reference to *Krauncha-giri*, in the first book. The other adventures of *Agastya* by the way as to the *Vindhya* mountain, and with *Vil* and *Vathan* the two cannibals, are adverted to as in the *Casi Cāndam* (before abstracted) only with more brevity.

Indra also adverts to his own penance, and thereby returns to the local and family affairs of the *asuras* and their posterity.

III. The *Vira Mahendra Cāndam*. Subrahmanya remaining at *Tiru-chandi puram* sent *Vira-bahu*, his general, as ambassador to *Mahendra-giri*, to ascertain whether *Surapadma* was willing to submit, or desirous of war. The ambassador was ordered to release the celestials that had been imprisoned by *Surapadma*.

* A colony went out from the land of Shinar under Ashur and built Nineveh, capital of the Assyrian empire. Ashur *Græce* is Assour, or Assur. Suria, in the Septuagint, designates Mesopotamia.

The proposal to submit was rejected; and various episodes occur, narrating various skirmishes between the belligerent powers. In one of these *Vira bāhu* killed *Adi-viran*, a principal commander on the part of the *Asuras*. It is not necessary to relate these incidents, as they possess a poetical and fictitious semblance; and since they are only introductory to *Cumara* himself coming forward in the war; which is the subject of the following, or principal division of the *purana*.

IV. *Yuddha Cāndam*. This book is the fullest of the whole; and narrates the events of the war or rather consecutive engagement, between *Cumara* on the one hand, and *Surapadma* on the other hand. The latter was aided by his sons, and also by a sister named *Mayi*, who, in one period of the contest, raised to his aid a host of illusive warriors. The sum total is that *Cumara* conquered the whole of the opposing forces, while *Surapadma*, with his sons, ministers, and allies, were slain. One of his sons named had hidden himself in the sea; and, escaping in consequence, was left in order to perform the funeral rites of his father and brethren. Thus the defeat of the *Asuras* was complete.

V. *Deva Cāndam*. After the victory *Cumara* left *Mahendra-giri* and coming back to *Tirupara-kunram* where he espoused *Deviyani* (otherwise termed *Valliyamma*) and then gave permission to the various celestials to return to their respective places of abode.

In the sequel of this book, *Saindavan*, the son of *Indra*, is introduced as inquiring from *Vrihaspati* the causes, or reasons, why those celestials were subject to those oppressions by the *Asuras*, which had occasioned the before mentioned war. *Vrihaspati* replies, and the contents of his reply form the subject matter of the following book.

VI. *Dacshana Cāndam*. *Dacsha*, the son of *Brahma*, asks his father which is the greatest of the gods, and *Brahma* is made to say is *Siva*. *Dacsha* then undertook a penance in order that a daughter might be born to him, that should become the wife of *Siva*. He had many daughters some of which were married to *Chandra*. One daughter was born, who performed penance in order to become the consort of *Siva*, which afterwards occurred. There follows a reference to the churning of the ocean, in which *Siva* swallowed the poison of the serpent *Vasuki*.

The sacrifice of *Dacsha* is afterwards detailed; to which the wife of *Siva* was not invited. She in anger destroyed herself. Siva sent *Vira Bhadra* to destroy *Dacsha's* sacrifice. A dispute afterwards arose between *Brahma* and *Siva*. The legend is then introduced of *Brahma* trying to discover the head and *Vishnu* the feet of *Siva*, according to which Brahma incurred a censure and loss for lying; and *Vishnu* received praise for acknowledging *Siva's* supremacy. The mention occurs of *Ganesa* fighting with and destroying *Raja-Muc'ha* an *Asura*. There is some following matter relative to a *Brahman*, who, in consequence of peculiar devotion directed to *Subrahmanya*, became a Mu-kundi king.

Remark.—As regards the condition of these two MSS, No. 7, is complete and uninjured, No. 8 wants a small portion of the 6th book; but for the rest is complete, and in good condition. In point of matter it seems difficult to resist the conclusion that these gods were originally men. I have always been induced to think that the war with the *Asuras* is a fragment of early history, strangely magnified and distorted. However I enlarge not.

Both manuscripts have a brief entry in the Descr. Catal. vol. 1, p. 165, Art. 89.

2. *Deva-rāyar Silāsāssancal.*—Inscriptions of grants by *Deva-raya*, (No. wanting,)

(1.) Dated in *Sal. Sac.* 1270, *Vira pratapa-deva-rayer* at the time of his coronation had a large *agraharam* or street containing thirty-three houses built, in a town bearing his own name which he then presented to the *Brahmans*.

(2.) Dated in *Sal. Sac.* 1300. Commemorates two public acts of munificence by *Bala-nayak* son of *Alupa-nayak* the friend of *Bukha*. He had a spring or aqueduct (which had gone to decay) repaired for public use. He also built a town called *Pillai-samudram*. Which he bestowed for a residence on the *Brahmans*.

(3.) Dated in *Sal. Sac.* 1303. *Bukha-raya*, the son of *Hari-hara-raya*, formed a village which he called *Hari-hara-raya-puram*, and gave it as a present to 13 *Brahmans*.

(4.) Dated in *Sal. Sac.* 1071. *Vishnu-verddhana*, the son of *Sāluvan*, the latter of whom ruled in *Dwāraca-puram* (*Dwāra-samudram*) from overcoming and killing a tiger acquired the epithet of *Osala* (*Oyisala*). At the time of his installation, or crowning of *Narasinha-deva* one of this race, he *Narasinha* made a donation of lands and cows to the fame of *Kesavasvāmi*, and also gave some lands to the *Brahmans*.

(5.) Dated in *Sal. Sac.* 1454. In the time of *Achyuta-raya* one named *Yellapa-nayak*, in order to ensure to himself both merit and fame, made large donations of lands to the *Brahmans*.

(6.) Dated in *Sal. Sac.* 1437. *Timma-raya* a king of the *Tuluva*, country of the race of *Vasuva-deva*, acquired illustrious reputation by acts of munificence.

(7.) Dated in *Sal. Sac.* 1152. The *Pratani* or Treasurer of *Hari-hara-raya* who was named *Ganda-danda*, fully repaired the injuries done by the Mahomedans at Vellore, who had demolished some fanes there, and presented those repairs as an offering at the shrine of *Chenna-kesava-raya*. (The date 1152 is equivalent to A. D. 1230, and corresponds with the period of the first Mahomedan irruption.)

(8.) Dated in *Sal. Sac.* 1055. In the time of the *Osala Vishnu Verddhana* a king named *Venaiyāditya* was born, who made large donations to secular *Brahmans*, and also to sacerdotal *Brahmans* officiating in fanes.

(9.) Dated in *Sal. Sac.* 1206. *Vallāla-raya* the son of *Vira Narasinha-raya* made donations of villages to various fanes, and to Brahmans.

(10.) Dated in *Sal. Sac.* 1206. *Vira Somēsvara Chacraverti* son of the last mentioned *Vallala-raya* made large donations of land to three fanes.

(11.) Dated in *Sal. Sac.* 1210. When *Vira Narasinha-raya* the son the above *Vira Somēsvara Chacraverti* was ruling with great equity, his *Dalavāyi* or chief general made large donations of lands to many fanes.

(12.) Dated in *Sal. Sac.* 1235. *Bommana-nayak*, the chief general of *Vira Narasinha-raya* formed some villages and *agrahārams*, which he presented to *Brahmans*.

(13.) Dated in *Sal. Sac.* 1235. Commemorates other similar donations from the same person.

(14.) Dated in *Sal. Sac.* 1131. *Vira Narasinha-raya* gave to his chief general certain lands in free tenure.

(15.) Dated in *Sal. Sac.* 1154. Commemorates a gift of lands in free tenure, by *Vira Narasinha-raya* to *Cāmaiyar*, a *Brahman*.

(16.) Dated in *Sal. Sac.* 1080. Commemorates a grant of fourteen villages to *Brahmans* by *Cotanda-nayak* in the time of *ViraNarasinha-raya*.

(17.) Dated in *Sal. Sac.* 1085. *Vishnu Danda-nayak* the *mantri*, or minister, of *Narasinha-raya* having several lands placed at his disposal, by permission of the said king, bestowed them on various *Brahmans*.

Remark.—Some of the preceding inscriptions are of earlier date, and greater value than usual. They require to be compared with the Manuscript entitled *Congudesa Rājakal*, as they seem to relate to the line of princes therein given; and (if I remember aright,) some of these dates and inscriptions are therein introduced.

Note.—This manuscript is injured, or damaged in a few places by the breaking off of portions at the edges, injuring the writing, and now irrecoverable; for the rest the document is in good preservation.

3. *Iru-samaiya-tirāsu*, or balance of the two systems, No. 202 C.M. 181.

This is a poem of the *Viruttam* kind, divided into 13 Chapters or Sections. It is a work strongly and argumentatively condemnatory of *Hinduism*. It states the ordinary view of the system, which makes *Brahma* the creator, *Vishnu* the preserver, and *Siva* the destroyer.

It expostulates on the want of homage to the acknowledged Creator; argues on the wives and families of gods, on the alleged penances performed by them, and on being represented as fighting with *Asuras*, and a variety of similar topics. The falsity of *Hinduism* is inferred; and then the Christian system is introduced and its leading points detailed. On inquiry I find it to have been the production of a *Vallāla* man, formerly a butler to Mr. Harrington; who after visiting England adopted the European dress, and was sent out to Madras as a Socinian teacher. He was well known as the late Mr. William Roberts. The book I learn was

written before he went from India; or had adopted the tenets of the Socinian system.

The manuscript is a little damaged by insects. It does not appear in the Des. Catal. and wants on the label the usual marks of classification. It has however all the other marks which distinguish the Mackenzie manuscripts.

4. *Udaya Cumara Cāryam.* A poem No. 162, C. M. 148.

This is apparently a fictitious poem, of which the hero is *Udaya Cumara.* Two leaves at the beginning are wanting; but afterwards is found a reference to *Vicrama* ruling in the *Māgadha* country, whose son-in-law stated to be *Satānica* renounced his kingdom, and resorted to a life of penitential austerity. From a collateral stem *Udaya Cumara* (son of the dawn) was born. His virtues, accomplishments, marriage, perfections of his wife, and splendour of his court are panegyrized. Probably some indirect parallel or flattery was intended to some other ruling prince. The metre is a species of viruttam; the palm leaves, and the writing are in good condition; and, but for the two deficient leaves at the beginning, it would be complete. It is entered into Des. Catal. Vol. 1, p. 221, Art. 25.

5. *Matiyulla-nātaca*, a drama, No. 126, C. M. 636.

This is a sort of polemical drama containing a medley of all sorts of versification. Its object is to teach the *Tātvā* system; but whether in jest or earnest, seems doubtful. A king is represented as renouncing his kingdom, and retiring to a wilderness, wherein he meets with recluses. He utters some words expressive of contempt; which leads them to utter language of contempt, referring to the Christian and Mahomedan systems of religion. He takes up some parts of their words, and shows what is his view of sin, and what is not sin. Another play of words occurs on the term *Mati*, and this leads the kingly sage to define what is *worth* or *sense*, and what is not *worth* or *sense*.

At last the recluses in the wilderness conceive the stranger to be a wonderful man, and beg him to instruct them in the *Tatva* system, such as in various parts of these papers has been explained. To this request he assents; and the instruction, in which there is much *equivoque*, follows. The probability is that the whole is a farce for the stage, heaping contempt and sarcasm, on every thing that bears the name and style of religion.

The palm leaves are injured by insects; but the book is complete. I do not find it entered in the Des. Cat. though it has some of the classification marks, and all the other usual ones.

6. *Capila vāsacam*, No. 143, C. M. 135.

A mere tale, symbolical perhaps, but more probably a puerile excrescence, arising out of the veneration felt for the cow: as it occurs more than once in the Mackenzie papers, it is probably an extract from a local

purāna. At a *Brahman's* village on the north bank of the Ganges (more probably the *Godavery*) a cow went out to feed, and was sprung upon by a tiger. The cow earnestly pleaded for permission to go home and suckle its calf; faithfully promising to return and give itself up to the tiger for food. The request being granted, the cow punctually kept its word; and the celestials struck with such an instance of moderation on the one hand, and of veracity on the other hand, appeared and bestowed beatitude on the tiger, cow, and calf.

NOTE.—The manuscript is in very good preservation. It is entered in the Des. Catal., Vol. 1, p. 217, Art. 12.

7. *Minácshi-pillai Tamil.*—A poem on the nursery, No. 194, C. M. 137. This production is a class, or sub-division, of the *Prabandhas,* or Tamil modes of composition; and is relative to the actions of infants. Ten stages of infantile age, and appropriate actions, or gestures, are usually enumerated. The author of this work applies these different stages to the infant *Minácshi*, daughter of *MaliyaDhvaja* king of Madura, and now tutelary goddess of the chief *Saiva* fane there. On the actions, or gestures of infancy he founds various panegyrical stanzas; fully illustrative of idolatry in its puerile form. However the work is intended to please, and amuse children, and fitted to instil idolatrous notions into the infantile mind; giving to its puerility a graver character. The ten sections are complete. The last, on rocking in the cradle, applies to the maturity of the ideal deities; the rocking of which, in a cradle, is one part of the ordinary service of the fane, usually termed usal, or unjal attal.

The manuscript is considerably damaged by insects, and has been restored on new palm leaves.

It is entered in Des. Cat., Vol. 1, p. 207, Art. xiv.

8. *Tonda-mandala-sātacam,* a centum of verses on the Conjeveram country, No. 148, C. M. 73. The *sātacam* is a poem of one hundred stanzas, in its appropriate metre. This is a complete specimen. The subject is a panegyric on the country, or district heretofore subject to Tondaman or *Adondai,* bounded by Tripety, and the *Cālahasti* mountains, on the north, by the sea on the east, by the *Pālar* river on the south, and by the Ghats, or mountain range, on the west. This country is highly extolled, and a special distinction is paid to the *Cāchi-ecambesvara* fane at Conjeveram. As such, it has a resemblance, in subject, to the opening of the *Saiva St'hala purānam* of that fane.

NOTE.—The manuscript is of very recent appearance, and is quite uninjured. It is entered in Des. Cat., Vol. 1.

9. *Tondaman Cadhai*, No. 166, C. M.

A reference to the four *yugas* with mention of *avatāras,* and of some rulers in those ages. The names are not those usually given: and it is added that, in those four ages, *Agastya* bore four different names. Im-

mediately there is reference to the formation of an *Agrahāram* at *Gurupācām*, the details of which are promised, but are not given as the document there abruptly ends.

Another following document has not the first leaf. Probably it only contained the invocation. The second begins with the *Kreta-yugam*, or earliest age, and goes on with the other *yugas* briefly mentioned. Then from *Janamejaya*, downwards to *Sālivāhana*, a few names are given. Subsequently to *Sālivāhana* several names are loosely stated of kings who ruled in different places, and at distant times; here put together, as if they followed each other; at least without any note of indication to the contrary. The story of the birth of *Adondai* appears to have been given, but a leaf or two is lost; and the loss is of no consequence. There is a list of kings strangely transposed in order; and, being on the same palm leaf, it cannot arise from confusion of the leaves.

The narrative of *Adondai's* clearing the *Tonda-mandalam*, his war with the *Curumba rāja*, and defeat, his having a celestial vision, followed by the occurrence of a predicted omen, and this by a complete victory, occurs as heretofore abstracted, from other documents. There is however no complete finish at the end.

Remark.—The confusion discovered to exist in this manuscript, apparently must rise from wanting many leaves either not copied by the writer; or, if copied, afterwards taken away. The book is evidently one and homogeneous; not composed of fragments of various books. Consequently, it must be passed as it is, and should the deficient leaves be at any time met with, they may be put into order. I rather apprehend that they will be found entirely wanting: except as regards the integrity of the collection the loss is of no consequence; since we have all the information elsewhere.

Note. The manuscript is entered in Des. Cat., Vol. 1, p. Art.

10. *Betāla Cadhai.* No. 209, C. M. 153. This copy contains the twenty-five tales of *Vicramāditya's* familiar demon, recited in verse of the species termed *viruttam*, and the series is complete. Any minute abstract of course, is here superfluous. The manuscript is rather old; but notwithstanding in extremely good preservation. It is entered in Des. Cat., Vol. 1, p. Art.

11. *Yogap'halan*, or results from astrological names of the lunar mansions No. 71, C. M. 232. This manuscript is defective; wanting from the 304th to the 318th palm leaf. The remainder is complete, and in good preservation. A single leaf not belonging to the book is appended: it pertains to some work on hymnology, the title not discoverable, by this one leaf. The astronomical *yoga* is a twenty-seventh part of the Zodiacal circle of 360°, but the astrological *yoga* corresponds with the lunar asterisms, 28 in number; the effects of which are considered, taken in connec-

tion with the days of the week. A translation of astrological works could alone develop the intricacies of the system of Hindu astrology; concerning which I have elsewhere made sufficient remarks. The manuscript is entered in Des. Cat., Vol. 1, p. 255, Art. 5.

12. *Mairavana Cheritra*, or tale of *Mairāvana.* No. 169, C. M. 158. This is a plain prose version of a tale relative to the captivity of *Ráma* and *Lacshmana* by *Mailrāvana,* a being from the inferior world. *Hanuman* proceeded thither, and released them; partly by stratagem, and partly by force. The tale is of the wildest species of fiction; and claims no very special notice. The manuscript has the appearance of having been copied only a few years since: it is complete and in good preservation.

NOTE.—An entry of it occurs in Des. Cat., Vol. 1, p. 218, Art. 18.

13. *Sanghattār Charitra*, tale of the Professors. No. 213, C.M. 87. This is a very imperfect fragment of a work relative to the formation of the College at Madura; in which there were forty-nine professors of the Tamil belles lettres. Its formation took place in the time of *Vangisha* (or rather *Vamsa*) *Sec'hara Pāndiyam.* The account of *Tiruvalluvar*, of his *Cural*; and of the destruction (as alleged) of the professors, in consequence, are narrated in the work; though only partially contained in this fragment. For the rest, though a little touched by insects, it is in good preservation; and is comparatively a recent copy.

NOTE. It is entered in Des. Cat. Vol. 1, p. 203, Art. 18.

14. A fragment (the distinctive mark × 201 recently affixed at the College.) Merely seven palm leaves, the contents of which on examination are found to refer to the foundation and appointments of many *Saiva* fanes by *Chola rājas* in different parts of the peninsula, with the dates of *Caliyuga* 3356 and *Sal. Sac.* 245. There is a Memorandum in ink, on the outside directing it to be copied on paper, and it may therefore be elsewhere entered in the MS. books; but, whether so or not, it is not of consequence.

15. *Palani nondi nātacam*, a drama, No. 116, C.M. 119. This drama was written by a poet of *Palani* (or Pyney) and is dedicated to the local god, that is, *Subrahmanya.* The subject is the adventures of a general, whose family is said to have come from *Ayodhya* (a general term for the north) and to have been successfully employed against the Mysoreans, in their invasion of the Madura kingdom. He eventually formed an illicit species of intercourse with a *dāsi,* or female slave of a fane, and stole the king's jewels from the palace on her account. Being discovered, his arms and legs were cut off, hence the title *Palani nondi* "or cripple of Pyney." He is represented as paying his devotions to the shrine of *Subrahmanya,* in consequence whereof the amputated limbs grew again. On this alleged miracle, the ironical praise of the shrine is founded.

Note.—The copy is complete; and in good preservation. An entry in the Des. Cat. occurs, Vol. 1, p. 214, Art. 3.

16. *Cheta cati-nondi-nātacam*, a drama, No. 127, C.M. 132.

A poet of Vaguti village in the south, of the Mahomedan class, wrote this drama, in imitation of *Hindu* productions. A Mahomedan bandit plundered in many places, and then placed the spoils at the disposal of a *dāsi* of the fane at Madura, by whom after a time he was rejected. He then went to Ginjee, and stole the horse of the Nabob at that place; in consequence of which his legs and arms were cut off; but *Cheta-cati*, a Mahomedan in power, gave the cripple a palanquin to ride in; and by worshipping his tutelary god the said cripple had his limbs restored. The drama is thence named "the cripple of *Cheta-cati*," and I imagine it to be a sly lampoon, on the mode in which Hindu books select the most flagrant wretches to make of them distinguished favorites of their deities, provided they only pay a little homage at the popular shrine.

Note.—The manuscript is complete, and in perfect preservation. It is entered in Des. Cat., Vol. 1, p. 216, Art 9. I have taken my different orthography from the Tamil title inside the book.

17. *Sugriva Vijaya*. The triumph of *Sugriva*. No. 152, C.M. 137.

A poem by *Rāja-gopāla*, the subject being taken from the *Ramāyana*. It relates to the deposition of *Vali* from the throne at *Kishkindi* by *Rama*, and the installation of *Sugriva* the younger brother of *Vali*, in his place. In return for this service *Sugriva* became the faithful ally of *Rama* in his war against *Rāvana*, for the discovery of *Sita*.

Note.—The MS. is complete and in perfect preservation. It is entered in Des. Cat. Vol. 1, p. 217, Art. 15.

18. *Crishna-dùthu*, the embassy of *Crishna*, No. 52, C. M. 11.

The five *Pāndavas* after the expiration of their penance in the wilderness, and gaining the friendship of a powerful ally, resolved before making war on *Duryodhana* to send to him an embassy in due form, demanding the restoration of their kingdom. *Dherma rāja* accordingly commissioned his kinsman *Crishna* to go on this errand; who accepted the office and went to *Duryodhana* with whom his demand was unsuccessful. *Duryodhana* thought of killing the messenger; but his father-in-law *Jacani* represented that openly to kill an ambassador was unlawful; and suggested a device to effect his imprisonment. This was to erect a seat on a throne over a dungeon on weak supports, with people underneath, prepared to put the ambassador in fetters. *Crishna* was sent, and on taking his seat found it give way beneath him: but, assuming a supernatural form, he destroyed the people beneath, and then told *Duryodhana* that it was not his office to do more; but announced the death of himself, and his kinsmen by *Bhima*. He then returned from his unsuccessful embassy.

NOTE.—The manuscript is incomplete. From 13 to 23 inclusive of the palm leaves are wanting, and one or two leaves at the end. It is old, but in moderate preservation. It is in verse, with a prose explanation: and is a part of the *Bārat'ha.* It is entered in Des. Cat., Vol. 1, p. 165, Art. 7 (*e*) two copies are mentioned: but I now find only this one remaining, and this had escaped my observation when examining part of the Tamil *Bārat'ha:* the whole of the MSS. at that time not having been in my possession.

19. *Māsa-p'halam* or monthly influences, No. 73, C. M. 235. This book though of small pocket size, contains several subjects.

1. *Māsa-p'halam*, a short, astrological work on the nature of lunar months, as regulated by the passing of the moon through the 28 *Nacshetras*, or divisions of its course usually termed "lunar mansions." There is an especial reference to the monthly position, and influence of a lunar constellation named *Vasu-devan*, otherwise *D'hanishta* in the solar asterism *Sravana.* It is the bow seen south of the ewer in Aquarius. The course of the sun, through the signs of the Zodiac, is also adverted to, with an astrological reference. The subject is made to bear practically on the proper and improper times for laying the foundation of houses; and is connected with prognostications as to the term of life of children, born under specified configurations of the visible heavens. It is complete and in perfect preservation.

2. *Tiru mantra.* This is a very short work relating to the bodily exercise of a *yogi* or ascetic; in suppressing the operation of the senses, bodily organs, and mental faculties; abstract contemplation only being excepted. This also is complete and in good order. From the hand writing, which is very familiar to me, I perceive that it must have been written, or copied at Madura.

3. *Sāpa nivirtti.* Two stanzas written under this title are quoted from the *Pûrnasûtra*, containing directions for removing the evil denounced by *Agastya* on the vegetable creation.

4. *Udal-ari-nyānam.* This title implies a knowledge of the human body, inclusive it is presumed of mind or soul, and relates to the Mahomedans. Its subject is the benefit arising from being votaries of Alla, Mahomed, Hassein and Hussein: and of course it is a sectarian tract.

The subjects with which it is tied up render it singular. It is a little damaged by insects, but complete. The whole forms one book of uniform appearance as to size: though the hand-writings differ.

NOTE.—It is entered in Des. Catal., vol. 1, p. 255, Art. 8, but with a reference only to the first part.

20. *Nandana chacraverti charitra*, tale of king *Nandan.* This is an epitome of a larger book. It relates to a king named *Nandana*, who built

a fane to *Renuca devi* a demi goddess. A man wished to get an interview with the king, but could not succeed; and being told that the only way to see the king was to commit some crime, there being very little care of government exercised, he assumed a power of levying tribute on bodies carried to be burned. The result was at length, that a complaint reached the ears of the king: and the king eventually made him his Minister.

Remark.—There is a resemblance in the leading feature of the tale to a traditionary statement, mentioned in my abstract of MS. Book No. 14, Sect. 10, 2d Report. A tradition of the kind popularly exists: the precise value of it I do not know. The book is fresh, and complete. Any entry in the Des. Catalogue does not appear.

21. *Tiru-vāvinan-kudi-antathi.* No. 156, C. M. 174.

There are three documents tied up in this book; the first has the above title, and is a series of ten chants, each of ten stanzas, laudatory of *Siva*, composed by *Subrahmanya desyar* son of *Ambala vana desyar*. It is complete.

The second is entitled *Tiru cachur nondi natacam*, a thief of the *Irumba-nād*, named *Gada viram* (apparently fictitious names), having no children did homage to the god of thieves in the *kallar* district near Madura, and in consequence had sons. One of these went and exercised his thievish vocation in the Madura country. The other plundered in the city of the Aurungabad padshah. The former having been cheated of the stolen property at Madura, came to Triplicane near Madras, where he stole the Nabob's horse, and in consequence had his arms and legs cut off. But going to *Tiru-cachur*, a village 30 miles south of Madras, he there performed homage to the idol; and in consequence had his arms and legs restored, the power of the image at that shrine is thereby intended to be magnified. This *nātaca* was written by *Varata-pillai*, the father of a Native Moonshee, some time since in my employ.

The third document contains a few leaves, the contents being ten stanzas in praise of *Tiyagara*, a name and form of Siva, worshipped at *Tiruporur*, about 20 miles south of Madras.

The three documents are complete, the first of them slightly touched by insects, the other two quite uninjured.

The document is entered in the Des. Cat., Vol. 1, p. 226, Art. 45, in which title *Avidam* is merely an orthographical error for *Avinan*, the epithet *tiru* or sacred, being usually prefixed; being another name of Pyney.

22. *Tiru-nuttantāthi.* No. 1098, C. M. 1075.

A poem containing one hundred stanzas of the *viruttam* kind, in praise of a *Jaina* image and shrine; by a *Jaina* author. Being defective at the end, the name of the writer, or locality of the shrine, does not appear in the document.

NOTE.—It is a little damaged by insects, and wants seven stanzas at the end. It is entered in the Des. Cat., Vol. 1, p. 162, Art. 41.

23. *Rangha-tantāthi.* No. 146, C. M. 168.

A defective production by *Pillai-perumāl ayengar,* one of the managers at *Srirangham* fane, in praise of *Rangha svami,* the form of *Vishnu* worshipped in that fane. It wants forty leaves at the beginning; but the remainder of the fragment is right. It has a mixture of poetical stanzas, with a prose explanation. It is a little damaged by insects.

NOTE.—It is entered in Des. Cat., Vol. 1, page 225, Art. 40.

24. *Tiru-tondar-yach'haganam.* No. 124, C. M. 89.

A poem of the *viruttam* kind, with prose version, the subject being low adventures ascribed to *Siva,* disguised as a *jangama* votary. The subject chiefly relates to modes of hospitality, in reference to eating and lodging; shown to a wandering incarnation of *Siva.*

NOTE.—The manuscript is complete, and in good preservation. It is entered in Des. Cat., Vol. 1, p. 203, Art. 20.

25. *Vaidya bālachi kitchai.* No. 84, C. M. 247.

This old book is a fragment: according to the No. on the first leaf, 288, foregoing leaves are wanting. It is defective in other places, and does not finish at the end. Various descriptions of diseases incidental both to children and adults, are mentioned; and the remedies are connected with charms, and mingled up, with cabalistical figures: apparently mere devices to impose superstitious reverence on the vulgar. They may contain spells more potent than I suppose. An entry of the MS. occurs in Des. Cat., Vol. 1, p. 259, Art. 4.

26. *Neduvalal pālaiya patta kyfeyut.* No. 230, C. M. 110.

This is one of the Madura districts; and the account is very similar to like documents, several of which have been abstracted. It is the district in which the fane of *Alaga Swami* is situated. The origin of that fane is placed in the time of the *Pandya* kings: but the chieftainship commenced with the new dynasty from the North. Except the names of chiefs, nothing further illustrative of the history of the south appears. Indeed very little incident down to the war against Tanjore. Subsequently the details are minute; but only with reference to the local district. After the troubles induced by the Mahomedans it gives the names of two chiefs who, by their titles, I recognize to be *Maravas,* who usurped a temporary power over the Madura kingdom. Other manuscripts mention the same usurpation; but without defining the country of those chiefs. This may be the *Marava* ascendancy over the Madura kingdom which *Veda nāyak,* a servant of Col. Mackenzie, by an anachronism places in the time of the old *Pandiya* kings and antecedent to the northern dynasty; concerning which I have been able to discover no satisfactory traces. But such a usurpation at the close of the northern dynasty, in the midst of troubles, introduced by *Chanda Saheb,* no doubt did occur. In his manuscript

there is nothing further of any consequence; though the details in the latter period are very minute.

NOTE. It is complete, and quite fresh in its appearance. It is entered in the Des. Cat., Vol. 1, p. 212, Art. 39.

27. *Siva rupānantam*, or the beatified form of *Siva*. No. 131, C. M. 188.

This is a mystic treatise on the isoteric system of the *Saivas*, of the kind usually met with only among *Pandarams*, or ascetic devotees of the *Saiva* class. It is divided into various small Sections, and is composed in *viruttum* stanzas. The book consists of only 30 small sized palm leaves, written in a close neat hand; and the whole is in extremely good preservation.

It is entered in Des. Cat., Vol. 1, p. 31, Art. 58.

28. *Abhirami Andati*, hymnology. No. 150, C. M. 170.

This is a small and imperfect manuscript, containing sixty-four stanzas out of one hundred. The subject is a species of eulogy addressed to a form of *Parvati*, composed in the kind of metre termed *antati*, by *Abhirami Pattar*, a Brahmin. The book is quite recent in appearance, yet is nevertheless slightly touched by insects. It was evidently left unfinished by the copyist, there being several blank leaves not written on. It is briefly entered in Des. Cat., Vol. 1, p. 226, Art. 42.

29. *Sara-nul* art of soothsaying by nasal respiration. No. 72, C. M. 234.

Apparently this small book is only part of a larger work. The subject is indicated by the above paraphrase of the title. *Saram* is equivalent to *Svāsam*, breath, but the art especially relates to the breath of the nostrils. This is observed at morning, noon, and evenings; or at peculiar times; and inferences deduced. By some the art is thought entitled to preference over other modes of divination. No doubt the breathing may indicate emotions of mind; however it is not my office to give any judgment as to the system. In point of condition the book is in good order. It is entered in Des. Cat., Vol. 1, p. 255, Art. 7.

30. *Sri-carunnur-utpatti*, notice of Brahman accountants, No. 212, C. M. 109. A legendary account is given of the marriage of the ancestors of the accountants, evidently a fiction. The husband and wife *Brahma* and *Saraswati* are said to have had 64 children; these married 64 daughters of a Brahman, named *Sancara Sōmācharya*. The 64 families thus formed were received by *Chenni Cholan* of *Cānchi puram*, and established in his kingdom, with many honorable marks of distinction. A detail is given of the towns and villages at which the several *houses*, that is, families were located. The tribe of the Brahman, is also specified. The office of these secular Brahmans was that of revenue accountants: but it would appear from this book that Brahmans versed in various portions of the *Vedas* were among them. Some reference at the close is made to the

Mahomedan and English governments. The writers, named *Narāyanā pillai* and *Vengu pillai* state the poverty of their tribe: and beg for protection, in the usual style of Natives. The MS. is of recent appearance, touched only in one place by insects, and is complete.

Note.—It is entered in the Des. Cat., Vol. 1, page 176, Art. 36.

[The "64 sons" are said to have accompanied *Chenni Cholan* when he marched from the north of India to *Tondamandalam*. There is no authority for this statement; except only that the Accountant Brahmans having of themselves come as far as *Sri Sailam* in *Telingana*, the *Tondaman* called them thence to the *Chola* kingdom. As another MS. mentions his having visited *Sri Sailam* on pilgrimage, he probably invited them personally. But this *Tondaman* is well known to have been born at Trichinopoly, and a historical mistake of consequence as to the "North of India," must be avoided.]

31. *Tiru-vādu-turai-koil cadha*, an account of the fane of *Vādu-turai*. This is a mere legend. The nine *Siddhas*, or supernatural sages, are stated to have done homage to *Siva*, and to have received from *Siva* a resplendent emblem, which they fixed as an image to be worshipped. The name of *Vādu-turai* is deduced from *Siva's* dancing at that place. Some particulars are added as to the orders and differences of the four colours, or principal castes, among the *Hindus*. The document is said to have been drawn up by one Native, in the English language, and by another Native rendered into Tamil, which seems somewhat strange. The book is divided into three sections, of which the above is the general substance. It is complete, fresh in appearance, and uninjured. An entry occurs in the Des. Cat., Vol. 1, page 178, Article 39.

32. *Muppan-totti-koil cadha*, account of the fane at Muppan-totti. No. 228, C. M. 55.

This very small manuscript is not complete, and seems to contain parts of two documents. In one is the usual legend of the *Pālar* river, *Nandi* was sentenced to become a mountain, and *Gangai* was sent down to wash away his fault. Thus the *Pālar* was formed; and various shrines on its banks are mentioned. In the other portion of the fragment, which wants the beginning there is a reference to a large garden formed by *Vira Sambhuva rayer*, and irrigated by water channels. The document differs wholly from the *Muppan-totti-ulā* on paper, heretofore examined. It is somewhat injured by insects, and worthless.

An entry occurs in Des. Cat., Vol. 1, p. 177, Art. 33, with sufficient accuracy: only *A* should designate the Palm leaf copy and *B* that on paper.

33. *Nala st'hala puranam*, a local legend, No. 29, C. M. 39.

Apparently this should be a large manuscript. The fragment that remains contains only 14 small palm leaves, and these not connected together; but, so to speak, like decimated leaves taken out of the entire book.

As a consequence there is no coherence, or intelligible sense. An entry occurs in Des. Cat., Vol. 1, p. 172, Art. 24.

The precise locality of the place I do not know, nor is it of any consequence to do so.

34. *Madhyārjuna Mahātmya*, No. 33, C. M. 41.

This manuscript contains a comparatively brief series of legends, forming the local *purānam* of a fane of the *Chola* kingdom. It was a residence of *Siva* and *Parvati;* and the image is one of antiquity. Minor tales of marvels wrought here are given. But the principal ones relate to *Vira Chola*, and to *Varaguna Pandiyan*, both of whom were relieved from the visitation termed *Brahma hatti*, occasioned by each one unintentionally killing a *Brahman*. The document affords nothing further requiring particular notice. The cure of *Varaguna Pandiyan* forms one of the sections of the Madura *St'hala purānam.*

NOTE.—The MS. is complete and in good order.

It is entered in the Des. Cat., Vol. 1, p. 173, Art. 25.

35. *Chitrakuta Mahatmya.* No. 30, C. M. 40.

This is a *St'hala purānam* divided into eleven *ad'hyayas* or sections, relating to a fane of celebrity in the Mahratta country. The above name is derived from a painted corridor, contained in it; forming the subject of one of the legends. From the contents I find the fane to be the same with the *Pundarica st'hala* which has heretofore been the subject of notice. It is termed *Crishna-cshetram*, and the presence of *Vishnu* is often adverted to. *Jaya muni* figures in most of the legends, which are all of them inane. The internal evidence of such documents is very unfavorable to the system of religious belief, which they tend to inculcate.

NOTE.—The document is in good order, the 23d and 42d leaves are wanting. There are 4 leaves of an inscription of no consequence. The document is entered in the Des. Cat., Vol. 1, p. 173, Art. 25.

36. *Narasingha raya vamsavali*, No. 243, C. M. 99.

According to the title, this book should contain a genealogy of *Narasingha rayer*, the conqueror of *Vijayanagaram*, and founder of a new dynasty. The document however is made up of a mere *mélange* of palm leaves of different sizes, and hand-writings; without order or connexion. At an early period of my inquiries it attracted attention, and produced a feeling of disappointment. It was set aside in the expectation that it might afford materials to fill up deficiencies in other MSS. This expectation has not been realized : and it is now passed on; being simply noted as containing fragments. It is entered in the Des. Cat., Vol. 1, p. 209, Art. 28.

37. *Padavur-koil kyfeyat.* No. 210, C. M. 33.

This book also contains a mixture of documents. A few older leaves relate to *Chitambaram.* One or two other leaves to *Kuvallattur* village.

The remainder of fresher appearance contains some brief and imperfect Memoranda relative to *Calattur*, *Purzalur*, *Chembur*, and *Puviyur*, villages in the Chingleput district; concerning some of which mention has already been made in these inquiries. These fragments seem to be of no value. The document does not appear to be entered in the Catalogue; and bears no marks of classification.

38. *Bhucola pramānam.* No. 76, C. M. 238.

The first twenty-three leaves of this document contain an abstract of *Pauranical* geography, relative to the seven *dwipas*, seas, and included matters of no interest in point of novelty. Three more leaves are occupied with a statement concerning the *kreta-yuga* or pure age.

The MS. has in some places suffered from insects; so as occasionally to injure legibility. It is entered in the Des. Cat., Vol. 1, page 256, Art. 11.

39. *Yuga-pramānam.* No. 133, C. M. 240.

This is a fragment of fourteen narrow palm leaves, commencing with the account of the *Kretayuga*, and coming downwards, with mention in the *Cali-yuga* of some kings, and with notices afterwards of rulers in Telingana, such as the *Chalukyas*, the *Rettis*, and others. A fuller list is given of the *Rayers* of *Vijayanagaram*. Some mention occurs of the *Ballala*, and *Chera* sovereigns. A few details of very recent dates are given as to Vellore, Tanjore, Madura, the capture of Tripassore, &c. But the document breaks off without a proper conclusion; perhaps was not at first completed. It is very slightly touched by insects. It is not entered in the Des. Cat. under the above title, but the word *Desanirnaya*, occurs on the labels both in Tamil and English. Under that title an entry is found. Vol. 1, p. 256, Art. 13. But only a very small portion of this pertains to *Pauranic* geography.

40. *Vallāla rāya ashta ganam.* No. 128, C. M. 90.

This book relates to the shrine at *Arunāchala* or *Trinomalee*, and to a ruler of the *Vallāla* or agricultural tribe, who in other books is mentioned with reference to that place. He was very munificent, especially to mendicant devotees, and gave whatever was asked to those who approached. Such being the case *Siva* at *Cailasa* asked *Nāreda* what news on earth; and was answered by a detail of the splendid munificence of the *Vallāla* King. *Siva* determined on putting it to the test, and came down to the earth, disguised as a *Jangama* ascetic. His form was very handsome, and he is represented as infatuating all the female slaves of the shrine at *Arnnāchala*. There were one thousand of them. The devotee then went to the gate of the king's palace; and on the king inquiring what he wanted, he asked for two good female slaves. The king gave orders to his minister to procure them, who sent persons for the purpose; but into whatsoever house of these *dāsis* the messengers entered there also

the *Jangama* ascetic was found. Unable to comply with the request the king sent his two wives. The so styled god now assumed the form of a young child; and, on the king being sent for to see the miracle, he recognised, in the whole an amusement of *Siva.* The latter satisfied with the devoteeism of the king took him with his family to *Cailasa.* On this profane fable—which is found in most of the *Saiva* productions—a festival of annual occurrence in the month of April, at Trinomalee, is said to be founded. And such are the superstitions, and worse than superstitions, buoyed up by popular countenance and patronage; very probably through ignorance of the real character of such observances, and from supposing them to be vested with the sanctity of religion.

NOTE.—The MS. is complete, and is quite fresh in appearance. It is entered in Des. Cat., Vol. 1, p. 204, Art. 21.

41. *Bhuvana cosha.* Hindu chronology and geography, No. 77, C.M. 239.

Details of small measures of time up to larger periods. The statements of *Pauranical* books, as to the seven *dwipas* and seas, inhabited by persons, in some cases, described as monsters. These various details are represented to have been delivered by *Siva* to *Parvati,* and *Nandi.* They are only the same kind of statements as have been in various ways repeatedly given by writers on these subjects, rendering minute abstract unnecessary. The book is a little damaged by worms; but the writing which is bold and clear, remains fully legible: and the MS. is complete. It is entered in Des. Cat., Vol. 1, p. 256, Art. 12.

42. *Nala-venpā,* the poetical tale of *Nala,* No. 207, C. M. 143.

This production is a version in elegant Tamil verse of the story of *Nala.* There is another book on the same subject in a different kind of metre. The foundation is an episode of the *Mahabhārata,* now pretty generally known; and (as it seems to me) unimportant, by consequence, to be abstracted at any length. The MS. has the appearance of having been written at different times; some leaves being much older than the others. It is a little damaged in some places, but otherwise complete. An entry occurs in the Des. Cat., Vol. 1, p. 219, Art. 21.

43. *Nāsi-ketu-purānam,* No. 31, C. M. 52.

The subject of this work is stated to have been delivered or narrated by *Crishna* to *Dherma rāja,* with a view to lead to a discrimination between virtue and vice. The hero of the subject, introduced with this object, is *Nasi-ketu* son of *Diviyanga maha rishi,* who was employed by his father to go every morning and fetch the water, flowers, &c. used in the ceremonies of the *Saiva* ritual worship. One day the young man idled away his time, and came late; on which his father, being angry, denounced on him the doom of going to *Yama-puram* and returning. His soul accordingly departed; and he went through the different regions of the

Hindu *Tartarus*, seven in number, being shown them by *Yama's* messengers; in which he received a minute detail of the punishment consequent to different species of crime. He was also allowed to see the happier division (or Elysium) of the same world, with the rewards allotted to virtue. After acquiring this knowledge his soul returned, and reanimated his body; when he employed himself in disseminating the knowledge which he acquired; continuing himself to be a votary of *Siva*. A translation would possess interest.

NOTE.—The MS. is complete ; and, though old, is uninjured. The subject occurs with variations in other Hindu books. The resemblance in the general subject to a part of Virgil's Æneid, is observable. An entry in Des. Cat., Vol. 1, p. 177, Art. 37.

44. *Nasi-ketu purānam*. No. 32, C. M. 53.

This MS. is erroneously labelled. Its subject is similar to that of the Telugu MS. entitled *Capota-vacya*. A pigeon seeing its mate taken by a hunter in his snares, voluntarily surrendered its own life. The hunter being pursued by a tiger, ascended a tree; and was fed by a monkey; which, when the tiger had retreated, he killed, and put in his bag. The monkey was beatified. See notice of the *Capota-vacya*. This MS. is in tolerably good order : but is incomplete. It is entered, as a duplicate of the foregoing one, in Des. Cat., Vol. 1, p. 177, Art. 37.

45. *Njāna matiyulla nātacam*, No. 125, C. M. 130.

This is perhaps erroneously labelled as a *natacam* or drama, its subject relates to *Kondi mahārāja* of *Alli nagara* who received lessons of divine wisdom from his minister; under the influence of which he had his minister crowned; while himself retired to the deserts to do penance.

It is a complete production, and the versification is composed of different kinds of stanzas. It is most probably a grave lampoon; intended, it may be, to be indicated by the term *Nātaca*. The MS. has sustained some little damage from worms. It is not found in the Catalogue.

46. *Nal-varzi*. The good way. No. 189, C. M. 237.

This is a sort of moral poem of the *ulā* species. It denies any other differences in the human kind, than the ordinary one of the sexes. Those who do good are of high caste, and those who do evil of low caste. To maintain life by the labors of agriculture is an honorable employ. Regret ought to be felt on the death of any relative. The merit of the mystic *Namasivayi* is enforced.

This work, though very brief, is complete.

A fragment of the *Tiru-mular*, a medical work, is added; and under that title seemingly the MS. is entered in the Des. Cat., Vol. 1, p. 260, Art. 10.

47. *Cumaresvara satacam*, a poem, No. 180, C. M. 196.

This is a composition of the measure termed *viruttam*, on Hindu ethics,

on the duties and obligations of the four great divisions of caste, together with a variety of moral and ethical precepts, or remarks, according to the *Hindoo* style of such kind of works. It is a book very common in schools; and this one bears an endorsement. Showing it to have been the school book of *Iyahpillai*, son of *Christian-pillai*, now well known to me as a Native Christian teacher. Six stanzas are wanting. The remainder is complete; and very slightly injured. An entry occurs in the Des. Cat., Vol. 1, p. 232, Art. 65.

48. *Ali-arasāni-ammani.* No. 136, C. M. 134.

This is an incomplete fragment of a sort of poem founded on the marriage of *Arjuna*, with a daughter of the King of Madura. At the commencement, as herein found, the wife of *Arjuna* is said to have had a dream, in which the local goddess or *Minācshi* gave her a flower. This was interpreted to mean that she would give birth to a child. Various inane filling up occurs: as a specimen, it is stated that the young woman's mother loaded carts and elephants with mangoes, and a variety of other (perishable) fruits, and sent them to *Hastināpuri*, to her daughter. It is needless to add more, respecting a puerile production which, from the kind of metre used, and the nature of the contents would seem to have been intended for the attendants on children in a nursery.

Note.—The fragment is not injured by insects. A brief entry occurs in the Des. Cat., Vol. 1, p. 216, Art. 11.

49. *Ecadasa-vriddham*, or the 11th day abstinence. No. 43, C. M. 1063.

An illustration of the merit of rigidly observing the 11th day of the moon's bright and dark half. *Rucmangada* was a king very exemplary in his observance of this period of rigid abstinence, and self controul. The consequence was that the people of his kingdom became so virtuous under his example that *Yama* or the regent of death lost his power and occupation, so that *Yama* preferred a complaint. *Brahma* produced a female named *Mohini*, whom he sent to divert the king from his steadfastness of purpose, who so far succeeded as to make the king engage either to break the said rigid abstinence or put his own son to death. He preferred the latter; but at the moment when the sword was about to descend on his son it turned into flowers, and his son's life was spared. *Yama* again complained, when the *Trimurti* accorded to him the grant that whosoever should fall asleep during the said night of watching, and fasting, should lose half the merit of the full and rigid observance. This tale is seemingly a *Hindu* version of a well known incident, which occurred out of the boundaries of India: it also holds up a medical lesson of some value.

Remarks.—There is a Telugu version of the same tale, and this one is chiefly in Telugu, awkwardly written, in the Tamil character. The style

of composition is also much diversified. It is complete, and in moderately good preservation.

It seems to be entered in the Des. Cat., Vol. 1, p. 216, Art. 10, under the title of *Rukmangada Cheritra ;* but from the book itself the lable in English has been torn off. The Tamil title is as above given.

50. *Vishnu cānchi kovil paditaram*, or ceremonial of the *Vaishnava* fane at Conjeveram, No. 226, C. M. 58.

This is a minute and rather curious detail of all the observances in the said celebrated fane, from sunrise to sunset, and those occurring during the night. A specification is also given of the days, designated by the lunar asterisms, which are set apart as commemoration days ("Saints' days") of the different *Aluvars*, or canonized worthies of the *Vaishnava* system. The work derives a measure of importance, from the consequence and extended influence of the site of idolatry to which it refers. A translation would be a curiosity, simply in that point of view.

Note.—The MS. is complete, and in moderately good preservation. It is entered in Des. Cat., Vol. 1, p. 178, Art. 41.

51. A fragment, title obliterated, No. 222, C. M. 180.

The title of this book in English is erased, and partly eaten off by insects, a word written in substitution is illegible. The title in Tamil is partly eaten away: what remains is *mulk mulk. Yuddham*, indicating a reference to Mahomedan wars.

From an examination it is found that the book seems to have related the origin of Mahomedanism at Mecca, with a variety of subsequent affairs; among which four great wars are specified. The locality would seem to be *Arabia*. They were proselyting wars : peace being offered on submission and adopting Islamism; if not extermination. A rejection of the terms led to these wars. On these matters information elsewhere exists: rendering the defective state of this manuscript of little consequence.

The usual marks of classification do not appear, and I cannot find any entry in the Des. Catalogue : other usual marks are on the manuscript.

52. *Jainya-ādimutal-nadattyam*, or affairs of the *Jainas* from the early times No. 172, C. M. 1073.

1. One part of this manuscript relates to eleven kinds of vegetables, ordinarily used in making Hindu dishes, which the *Jainas* are forbidden to use. If any one eat those vegetables he is considered to be no better than a dead carcase. The subject appears to be a part of the *Srāvana Dherma*.

2. A detail of kings from early times, down to the accession of the English Government. This list is in the former portion is in *Grant'ha* letters. It commences with *Vartamāna svāmi*, a name of Budd'ha; the other connected names are *Rishabha*, *Bharata*, *Sacara*, and 12 others termed *Chacravertis*. A list of some other names seems to me compos-

ed a little a trandom, judging from the mixture: reaching to the era of the *Māgadha* kingdom. The name of *Srenica maha raja* is given, with the addition that he ruled 2540 years ago (to be reckoned backwards from A. D. 1817.) The end of the virtuous period and commencement of the *Cali Yuga* is dated 2480 years since. (These valuable dates the *Bauddhas* are known to preserve by means of memorial verses; and the latter gives, for the beginning of the *cali-yuga*, the date A. C. 463.) The next point mentioned is the rule of *Sacya* or *Sacai*, dated 1739 years backward, (*Sacya* of course means *Sālivahana*, and Sal. Sacai. 1739)—corresponds with A. D. 1817. The *chola rājas* are then mentioned as ruling in this country; that is, the southern part of the Peninsula. A seemingly credible list is given down to *Adondai*. The kingdom was afterwards broken up, divided into various portions and the *curumbars* acquired an ascendancy. The *chola* rule lasted about one thousand years. Afterwards the Mahomedans ruled 120 years: and some names of their chiefs are specified. After them the English had ruled during seventeen years, when the account was written.

3. The story of *Vencatapati nayak*. This narrative has before been given (see 1st Report MS. Book No. 12, Sec. 2.) It relates to a trick played upon a district chieftain by some *Jainas*, and his revenge leading him to persecute and exterminate the *Jainas*.

4. The periodical deluge. This document also has been abstracted in a foregoing paper. (See 1st Report MS. Book No. 12, Sec. 1.)

5. Claims of the *Jaina* fane at *Chittamur*. It is a principal one. *Kulottunga Chola* gave it a revenue of 4,000 Pagodas, afterwards inequitably reduced by the Mahomedans to 60 Pagodas, concerning which reduction a complaint is preferred to the Honorable Company. Copy. Compare with MS. Book No. 12, Sections 5 and 6.

Remark.—The second part, or section of this MS. is valuable. Accordingly I have noticed it rather fully. The book being in good preservation, it can at any time be consulted in verification. I note merely that adding to A. D. 463, the amount of nearly nine centuries, the discovered interpolation of the Brahmans, we ascend to about A. C. 1300, and at A. C. 1200, from *Hindu* records solely, I had heretofore placed the commencement of the *Cali-yuga*, with the conjecture that it must certainly be placed later. Let no one therefore hastily contemn researches which evidently have a tangible bearing. Fixing the commencement of the *Cali-yuga* in the 5th century before the Christian era, I am certain of the great outlines of history downwards; with very much of the needful filling up of details. Antecedently, the *pauranical* enigmas require solution; and their solution, whenever successfully effected, will show results which I can mentally anticipate; but which must be analytically, and not hypothetically demonstrated.

Note.—The MS. is entered in Des. Cat., Vol. 1, p. 161, Art. 39, with the title written down, as I apprehend, from the pronunciation of a foreigner.

53. *Jaina-pustaca Zapetah*, a Catalogue of *Jaina* books, No. 170, C.M. 1062.

Of this catalogue an injured copy was before met with, in the manuscript-books. This is more full, and in better condition. The names of Sanscrit books are given in *Grant'ha* characters; and those of Tamil books, in Tamil letters. The catalogue is not extensive, the whole being contained in eighteen narrow palm leaves, not all full. The document is in good condition. It is entered in the Des. Cat., Vol. 1, p. 162, Art. 42.

54. *Jaina Caumudi Cadhai*, No. 163, C. M. 1077.

This book opens with a reference to *Srenica*, a king of *Māgadhā*, whose town resembled *Alacāpuri* (the Capital of *Cuvera*,) *Srenica* went to *Gautama Buddha* for instruction in the doctrines of the *Jaina* credence. And *Gautama* is then stated to have detailed a series of tales received from *Uditodaya*, a king of the Northern *Math'ura*, narrated to his minister, which were first related by *Arhadasa* to his wives, eight in number, their names being given. Each of the tales was told during one night. The subjects were calculated to illustrate the dogmas of the *Jaina* credence; and each tale made one of them a convert to that system, with the exception of one, who remained sceptical to the last. The tales are in the Oriental taste, as to kings, their ministers, &c. &c. The object is to inculcate moral truths; which, simple and unadorned, might be deemed tedious: but partaking more of the nature of fable than of plain narrative.

Note.—The book is complete, and only very slightly injured by insects. It does not bear the marks of classification, but I perceive, from the subject, that it is entered in Des. Cat., Vol. 1, p. 156, Art. 17, as MS. under the title of *Samyaktwa caumudi*, the title of a Canarese manuscript.

55. *Kilayur-isvara-Tirunamali-tirucovalur sila sāssanancal*, or the inscriptions on stone in a fane at *Tirunamali*. No. 15, C. M. 967.

This book disappointed expectation. On examination it has proved to be a mass of unintelligible matters. There are a few Tamil verses, the writing intermingled with *Grantha* characters. Some incoherent copyings in the same character. It seems quite clear, that the inscriptions copied were not coherently legible; as is often the case. Hence the copiers seem to have transcribed as well as could be done. The result is as above indicated. The leaves of the book are not of uniform size: and several of them are considerably injured by insects. The whole seems to be of no value.

56. *Tiru Virinjai-pillai Tamil*, No. 191, C. M. 136.

The *Pillai Tamil*, is one of the classes of Tamil composition; and professedly describes the state of childhood, from the earliest infancy, with the actions and employments then usual.

The Minac'shi pillai Tamil, for example, is a poem on the infantile gestures and pastimes of the tutelary *Durga* at *Madura*. This present poem has reference to an image of *Cumara* or *Subrahmanya*, worshipped at the town called *Tiru Virinjai.* Ten stages of infancy are noted, as usual; and to each stage an appropriate gesture, or amusement, is ascribed. These are dwelt on in verse of the *viruttam* kind. The book I am told is common in Native Hindu Schools. Such compositions in a remarkable manner display the puerility of idolatry: even as others show its more grave and aggravated features.

NOTE.—The document wants a few leaves in different places; but is in a very tolerable preservation. It is entered in the Des. Cat., Vol. 1, p. 217, Art. 13.

57. *Vencata venpā*, a poem on the *Tripeti* god. No. 149, C. M. 169.

Stanzas of the *venpā* (or Sonnet) species of verse, in praise of *Vishnu*, in the form worshipped at *Tripeti;* composed by *Pillai Perumal-ayengar*, a *Vaishnava* Brahman, and manager of the fane. Several of the stanzas are wanting. Some of the remaining leaves are slightly injured. It is entered in the Des. Cat., Vol. 1, p. 225, Art. 41.

58. *Tiru pācayur poyamorzi-isvara coravanchi.* No. 120, C. M. 121.

This is a drama composed in almost every species of Tamil versification, and relates to the adventures of *Siva* as worshipped at *Tiru-pācayur*, in the South. It is an enlargement on the gross fable of *Vishnu* transformed into *Mohini*, and wedded to *Siva ;* which is as nectar to the *Saivas ;* and as poison to the *Vaishnavas*. It is quite unnecessary to dwell on the contents; which are of the order of low comedy. It is not complete; but is in good preservation. I do not find any entry in the Des. Catalogue.

59. *Nellai-mālai*, a poem. No. 197, C. M. 180.

This production is of the *Caliturai* species of versification. It is panegyrical of the *numen* worshipped as I think at *Tinnevelly.* Ten stanzas are wanting. The remainder is in good preservation. It is entered in Des. Cat., Vol. 1, p. 227, Art. 50.

60. *Grahasphuta*, an astrological work. No. 74, C. M. 236.

The subject of this work is the forming a horoscope, consequent to noting the exact moment of birth; and from the configurations of planets at the time, inferring the future adverse, or prosperous, circumstances of the child. It is an incomplete copy. What remains is only very slightly injured. An entry occurs in Des. Cat., Vol. 1, p. 256, Art. 9.

61. *Bhāsyacāra-charitra*, an account of *Ramanuja*. No. 244, C. M. 100.

This is a sort of biographical notice of *Ramanuja* the *Vaishnava* champion; the name of Bhàsyacàra (or linguist) being a titular name. The chief subject of the book relates to the recovery of two fanes from the *Saivas*. Of these the principal one was *Tripety*. It is stated that when the Tondaman visited that place, the god told him there was no need to come daily; and presented the *chank* and *chacra* which the Tondaman

took away. From this deficiency the *Saivas* and *Jangamas* attempted to turn the fane into one of *Subrahmanya*, and great disputes arose, in consequence. *Rāmanuja* went thither; overcame the opposers; and bestowed a new *chank* and *chacra* on the god: afterwards the place became a *Vaishnava* fane of great celebrity. The other fane was that of *Chellapillai* of less repute. In this case the Mahomedans were concerned, by taking away the image. The name of the Town is Tiru-narayana-puram. *Ramanuja* went to the Sultan, and obtained the image by means of the Sultan's daughter. According to this book the Sultan's daughter made the image a toy, or play thing; and there is some fable added, needless to be detailed. It further states that the said daughter of the Sultan accompanied *Rāmanuja*, and by his merit acquired beatitude.

The document is incomplete, and a little damaged. It is of some interest; and may be compared with a portion of the *Carnataca rājakal.* An entry occurs in the Des. Cat., Vol. 1, p. 207, Art. 29.

62. *Jāti bheda nul*, or rule of *caste* divisions. No. 193, C. M. 103.

This on examination is proved to be another copy, on palm leaves, of a work on the differences of caste by *Ulaga nāt'han*, heretofore abstracted, from a paper MS. There is no need of repeating what was then stated. It may be observed that six great divisions are specified; owing to local divisions, among the *Vishnavas* and *Saivas*, also that six general causes are laid down; the operation of which, in all cases, produce degradation of caste: these in general refer to illegitimacy, or irregularities. The entire total of castes enumerated is ninety-six.

Note.—This manuscript is complete, and only very slightly touched by insects. A brief entry occurs in the Des. Cat., Vol. 1, p. 211, Art. 37.

63. *Idankai valankai kyfeyut*, account of the right and left hand classes. No. 39, C. M. 182.

In the commencement of this book there is a reference to the *yugas*, and to the solar, and lunar, lines of princes, merely as introductory to the principal matter. This relates to a great dispute between the *Vaishnava* Brahmans with their followers, who have the epithet of right hand, and the *Saiva* Brahmans, with their followers, termed left hand. The dispute is stated to have arisen from the usage of a *Garuda* banner, or flag bearing the eagle, or kite of *Vishnu*, as a device. The right of bearing this banner, and the question to which of the two classes it belonged, created so hot a dispute, that the matter was referred in arbitration to *Vicrama-Chola-deva Perumal*, in *Cali-yuga* 4894. That prince caused the old copper plate records at *Conjeveram* to be disinterred and examined; and legal authorities to be consulted. As a consequence the claim of the *Saivas* to the *Garuda* banner was admitted; but another result was, the more accurate distinction, and definition of what rights and privileges were proper to the two classes; and what were not so. The book further contains

an enumeration of the classes, or castes, into which the two lines of *Vaishnavas* and *Saivas* became divided, and of the Pariars, and others, who range under the right hand class. These castes on both sides are stated to be ninety-eight. The sub-divisions are those of persons having caste; that is, not Pariars.

Remark.—This book differs from my anticipations concerning the contents. At Madras and elsewhere, the term right hand caste is made to apply to the Pariars, and to a few retail dealers in various commodities, while left hand is applied to all *Hindus* besides; and between these two divisions there has always existed irremediable strife. But the Manuscript under notice only indirectly relates to these. Various traces of hot disputes, on mythological, and other subjects remain: with which discussions on banners, and distinctions, would be likely to be mingled. The result has been a separation, amounting to opposition, between the *Vaishnavas*, and *Saivas*, and the formation of a medium class, the *Smartas*, followers of *Sancarācharya*, who, though professing to follow the *Smritis*, or ancient laws, and to reconcile differences in the two extremes, by way of a *juste milieu*, are in reality *Pantheists*, and almost Atheists. I deem this book rather curious, and could wish, at leisure, to give it a full translation.

Note.—There is a deficiency towards the end; but there is no defect in the connexion of the matter as far as it proceeds; and the condition of the book is tolerably good. A brief entry occurs in the Des. Cat., Vol. 1, p. 203, Art. 31.

64. *Avidaiyar-kovil-st'hala-purānam*, or legend of the fane at the town of *Avidaiyar*.

This is the legend of a fane bearing the same name, with its town or village; the site of which is a little to the south of Chitambaram. The observable points are the occurrence of a dispute, as to right of property, between the *Curumbars*, and the *Vellazhas*, to settle which the king of Madura came hither in person; and the other is the tale of *Mānica vāsacar* herein reproduced with reference to the making away with state-money, in building and repairing *Saiva* fanes—the miraculous supply of horses, and other consequences as heretofore, with sufficient minuteness, detailed.

Note.—The manuscript is of recent appearance, complete; and in perfect preservation. It is entered in Des. Cat., Vol. 1, p. 171, Art. 24.

65. *Tiru-uttara cosamanga st'hala puram* (private mark x 14.)

This is merely a bundle of palm leaves, written on, without covers, labels, or marks, save the one above indicated. It has not the appearance of the Mackenzie MSS.; and does not appear in the Catalogue. It is the production of *Vellai ambala Pandāram* of Madura, who meditating the *Bhavish'ottara Purāna* rendered praise to *Ganesa*, &c. &c.

The *Purāna* was narrated by *Sanatcumara* to *Yogesvara* and other ascetics, dwelling in the valley of *Cashmere;* which by name, as *Cashmir-desam* is included in *Hindu* geography. The work consists of two parts: the first part contains 12 *adhyāyas,* and the second 3 *adhyāyas,* or sections. The subject of each Section is as follows:

First part, 1. *Veda mitra nāyaca* (an epithet of Brahma) obtained the *Swerga* or *Indra's* paradise.

2. *Brahma* removed the evil denounced on female *Gandharbas,* or choristers of that paradise.

3. The excellence of the Saiva five-letter-charm, the value of the *Vibudhi* or sacred ashes, and of the *rudracsha* beads; the rewards of those who use, or employ them.

4. The fame and eulogy of the sacred reservoir of water.

5. Removal of the doom of *Hari-dvaja.*

6. The beatification of *Nala Chacraverti.*

7. The excellence of *Bala-cal-puri; Veda-puri;* and other places.

8. Concerning the indulgences or pardons, granted to those who have sinned.

9. Observances needful in cases of marriages.

10. Tales illustrative of the same.

11. Narratives by *Agastya* to *Savunaca,* and others.

12. The excellence of the great fane to the South of the *Cāveri.*

Second part, 1. A description of the *surupa* (form, or image) of *Para Brahma;* thereby meaning *Siva.*

2. The excellence of the fane of *Uttara-cosa-mangalam.* This second part remains unfinished, or at all events incomplete in this copy. The paging is regular from the commencement without intermediate break. The MS. has a recent appearance, and it is in perfect preservation.

66. *Casum-padai-vettu,* the war of Casum. No. 199, C. M. 156.

This document is a poem, the hero being named *Casum* (or more probably Casim) who is stated to have been an immediate descendant of *Hassein,* one of the two famous brothers, Hassein and Hussien. The said hero became greatly distinguished in wars. The site of which seems to have been the borders of Arabia and Persia, or the country between *Bagdad* and *Arabia.* The document is consecutive as far as it proceeds; that is to the end of the 40th palm leaf; but the subject remains unfinished. I do not suppose it to be of value: as there are sufficient histories of the wars which occurred during the early periods of the *Caliphat.*

Note.—The MS. is entered in the Des. Cat., Vol. 1, p. 228, Art. 31.

67. *Subrahmanya vilasam,* a drama. No. 201, C. M. 141.

This is a *nātaca;* and, as I understand, the drama is popular, and very often represented in, and about Madras. It is founded on the episode in the *Scanda-purāna,* concerning the marriage of *Subrahmanya* to *Valli-*

yamma, in local usage; or of *Cumara* and *Cumari,* more frequent in poetical books. *Crishna* is represented as visiting the Paradise of *Indra* to procure a flower of the tree of plenty, to present to his wife *Rucmeni;* and he therein directs the birth of one of the inhabitants on earth, in order to become the wife of *Subrahmanya.* The said celestial was born as the daughter of an animal, and was adopted by *Vibudhi,* a hunter, and fostered by him and his wife; becoming ultimately the spouse of the *Hindu* war-god. It is superfluous to add more.

Note.—The MS. is complete and in good preservation. It is entered in Des. Cat., Vol. 1, p. 218, Art. 19.

68. *Veda-puri st'hala purānam.* No. 27, C. M. 37.

This is the local legend of a fane near *Chitambaram;* the name of *Veda-puri* being an epithet. It is a large book, and has a great variety of tales, mythological, fabulous, and historical; in the manner of the principal local *puranas* of the Peninsula. Of the mythological portion may be instanced, the marriage of *Siva* with *Uma;* the obtaining of the *vel* or javelin by *Subrahmanya*; the acquirement of privilege by *Vināyaca* or *Ganesa*; the local incarnation of *Siva* to teach the mystic sense of the *Vedas:* or that system by which the *Saivas* of the Peninsula altogether set aside the four *Vedas:* and substitute a system of their own. Of the fabulous, the leading incident is the marriage of *Arjuna* to *Subhadri,* though there are many tales of other devotees. Of the historical, the chief, if not only, portion is first, that from this place *Adondai* or *Tondaman* recovered himself after defeat, and set out with reinforcements, accompanied it is herein said by *Siva,* who had given a mystical sign, afterwards met with, issuing in the conquest of the *Jaina Curumbar,* and possession of the *Tonda mandalam*; and secondly, the introduction of the narrative of *Sampanter,* who is always stated to have set out from this place, otherwise termed *Vedaranya,* when he proceeded to Madura, and there overcame the *Bauddhas*; who were afterwards impaled.

Remark.—The book is written in recondite poetical language, of the *viruttam* versification. With the exceptions indicated, it is a little other than a centum of extracts as to incident from older *puranas;* many of the scenes being, by poetical license, transferred to the place. The site of the narrative is however the ever recurring *Naimisara vanam*; a certain terrestrial garden, the praises of which are loudly sung, but of which the precise locality is doubtful. It is there said to be narrated by *Suta,* the reciter of the 18 *puranas,* to the assembled *rishes.* The composition of the work, as a Tamil production, is said to have been by *Carunạcāra,* who wrote under the favor and aid of poets and learned men. This may be a merely titular name.

Note.—The MS. is complete and fills 277 closely written palm leaves: it is of recent appearance and in good order. An entry occurs in Des.

Cat., Vol. 1, p. 171, Art. 22—which, upon the whole, may pass; but an oversight occurs in stating the work to be "translated by *Appana, Sundara, Manikya, Vasaka,*" implying that these are the names of one individual; whereas *Appar*, and *Sundara*, and *Manica vasacar* were three famous poets of high repute: and, though their writings may have assisted the author, yet the composition itself is of more recent date.

69. *Chitambara Coravanchi.* No. 119, C. M. 120.

This is a composition of various metres adapted for singing, and may, so to speak, be termed an opera: founded on the tale so delightful to *Saivas*, of the transformation of *Vishnu* into the form of *Mohini*. In this work *Siva* is identified with the image at *Chitambaram*, usually styled *Sabapathi*, or lord of the assembly. *Mohini* is represented as secretly pre-possessed in his favor; and on meeting with a *Curatti* or fortune telling gipsy in the woods, has her fortune told, and receives a description of *Siva* as seated on his vehicle, surrounded by attendants, &c. The work is a fragment, old, and damaged. It is entered in the Des. Cat., Vol. 1, p. 204, Art. 4.

70 *Pattanattu pillai Tamil pádal.* No. 194, C. M. 177.

This book, in its present state, is a curious assemblage of subjects. There are some leaves containing merely a table of bazar weights and measures. Others contain portions of poems in very different metres. There are some portions which from the title, I conjecture may be the proper contents, that contain *Nindāstuti*, or ironical praise of the *Hindu* so called deities. A variety of *pauranical* incidents are taken up, slightly *parodied*, ridiculed, and turned into mock praise. And it must be admitted that modern *Hindu* mythology, especially in the Peninsula, offers such incidents in copious abundance. An entry occurs in Des. Cat., Vol. 1, p. 227, Art. 47.

71. *Cumb'hakona Virabhadra Tambirān parani.* No. 147, C. M. 91.

In the title this work is ascribed to *Otta Cuttan* the truth of which ascription admits of doubt. In the introductory portion there is eulogy of various names of deities chiefly of the *Saiva* description. The subjects of the work are principally two. The first is the destruction of the *Samanār*, at Madura, by means of *Sampantar*, which is herein produced, differing, not in incidents, but words from the account in the *Madura* local legend. The second subject is the destruction of the sacrifice of *Dacsha* by *Vira Bhadra*, the angry form of *Siva*. This is told at length. There is it seems at *Cumbhakonam* a fane dedicated to *Vira Bhadra*, and hence the praise directed to that form, because of the two leading incidents of destructive character which are narrated.

Note.—The MS. is complete, and in good preservation. An entry occurs in Des. Cat., Vol. 1, p. 204, Art. 22.

72. *Vira Bhadra Tambiran keyfeyut.* No. 245, C. M. 92.

The chief purport of this MS. is the detail of the names, the privileges, and places of sepulture of a line of chief ascetics styled *Tambiran*; belonging to the aforesaid fane of *Vira Bhadra* at *Cumbhakonam*. The origin of the monasterium of this class of *Vira Saivas* is dated in the time of the *Nayaks*, that is, I presume, of the Viceroy's from *Vijayanagaram*, who afterwards became sovereign princes. The names of twelve of those chiefs, or *Tambirans*, is given. It is to be observed that they do not burn, but bury their dead.

NOTE.—This book is in good preservation; the close leaves a doubt whether it be finished or not.

An entry occurs in Des. Cat., Vol. 1, p. 214, Art. 23.

73. *Tondamandalam, Cholamandalam, Pāndyamandalam rājākal keyfeyut.* No. 241, C. M. 66.

This is a large book composed for Col. Mackenzie by *Veda nayak*, who is now pretty generally known as the Christian poet of Tanjore. He is the author of some useful works; and of this book, and the *Chola purvica charitra*, bearing somewhat of an historical character. In this book there are statements concerning the *Pandya* and *Chola* kingdoms, and the *Tondamandalam* or region bounded on the South by the *Pálār*, North by *Cālahasti* and range of mountains, East by the Sea, and West by the ghauts. The whole of the statements are too much tinctured by the author's personal sentiments and opinions; and by adoption of sentiments received from Europeans: as for example that the Brahmans originally came from Egypt. In some cases his conjectures, and hypotheses are very bold. He asserts for instance, that the origin of the great *Saiva* fane at Madura was none other than a *lingam* placed over the ashes of a deceased king; according to modern ordinary custom, as regards deceased *Saivas* in general. A sort of fictitious importance was given to the book from one of its statements having been brought into special discussion. This may be seen in the *M. Journal of Literature and Science*, Vol. 6, Art. 12, pp. 144-146, to which a reference only is all that is now requisite.

The most valuable portion of the document, as I judge, is the account of *Kullottunga Cholan*, and of his illegitimate son *Adondai*, the founder of the *Tonda* kingdom, by conquest from the *Puralālar*. At Tanjore the author was favorably situated to gather up traditions concerning the parentage of *Adondai*, and consequent matters. The events of the war however, with the *Curumbar*, are better gathered from other Manuscripts of the collection.

The conquest of *Tondamandalam* led on to the invasion by *Kulottunga Cholan* of the *Calinga* country, or *Telingana*: an event of great consequence; and bearing on which there is a wide, and varied range of evidence.

The MS. when examined was fresh, slightly injured by insects at the beginning. It is entered in the Des. Cat., Vol. 1, p. 183.

74. *Periya Purānam*, the great legend. No. 13, C. M. 20.

The subject of this book is an account of sixty-three specially distinguished devotees of *Siva*; whose leading actions, procuring them such notice, are detailed. This copy contains verse only, without any prose commentary. It is complete, and in very good order.

Another copy, No. 14, C. M. 21.

This Manuscript contains the original verse, with a brief prose comment, or interpretation. It comes down to the end of the twenty-third of the aforesaid votaries. The remainder is intimated to be contained in another book, for which I have searched the collection, but without finding it. As far as this MS. proceeds it is without defect: one leaf is a little injured by insects; the remainder in good order.

In a MS. book of the collection there is a paper containing an Abstract in Tamil of the contents of this *Puranam*: and I refer to the notice of that book, in a following page, for an indication as to the general nature of the contents, which in the leading points are the same in all three copies.

Note.—These two palm leaf copies, with the paper Manuscript, are entered in the Des. Cat., Vol. 1, p. 167, Art. 14. As only three copies are mentioned, I infer that no sequel to No. 14 was at any time in the collection.

b—Manuscript Books.

1. *Manuscript Book. No.* 8. *C.M.* 22 *and* 63.

Section 1st. *Periya purana*, or the great legend.

This Manuscript is an abstract of the large work, on palm leaves, and contains brief notices of the following votaries of *Siva*.

1. *Manu-neri Cholan*, the king who put his son to death, for running his car over a calf, in the street of *Tiru-varur*.

2. *Sundara-murti*, son of the *Sadaiyanar*, who for chanting in honour of *Siva*, at *Tiru-navalur*, was taken to *Cailasa*, the paradise of *Siva*.

3. Three thousand *Brahmans*, doing homage to *Siva*, were allowed to reside in the *Tili* wilderness at *Chitambaram*.

4. *Tiru-nila cand'ha*, a potter, and his wife, by giving food to devotees of *Siva* acquired beatification.

5. *Pugerzh*, a merchant, and an inhabitant of *Caveripum-patnam*, for giving food to devotees of *Siva*, was beatified.

6. *Iliyàn cudimaran*, an inhabitant of the town called *Ilasai*, a devotee of *Siva*, had his devotedness tried by reducing his family to distress, and afterwards received tokens of favor.

7. *Meporul-nāyanar*, a king, or chief of the *Lada* country, long waged war, unsuccessfully, with a *Bauddha-raja*: at length he took advice from *Saiva* votaries; and at their suggestion, disguised himself as a *Saiva* ascetic, and with a *Tambira*, went to the palace of the *Bauddha* king, with a book in his hand. The king came out to meet him, and asked him what

he wanted, to which the reply was, that he came to teach him the contents of the book; and that if allowed to enter inside the palace, he would do so. Leave was granted; and, putting the book into the hands of the king, he told him to read; while the latter was doing so, the disguised chief took out a knife, and cut the king's throat. An alarm arose in the palace, and the *Lada* chief prevailed on the warder of the palace to allow the *Tambiran* to escape out of the bounds of the country, before he should lose his own life. The god is represented as being pleased at this affair; and, appearing on his bullock vehicle, gave tokens of favor, and beatitude to the said *Meporal-nāyanar*.

8. *Viral-minda-kandan*, of *Chengananur*, occupied himself in reproving such worshippers as came in a dirty, or unclean state to do homage; and in consequence he received from *Siva* favor and beatification.

9. *Amar-neti-nāyanār*, a *Vaisya* (merchant) inhabitant of *Parziyarai*, was accustomed to give presents of small cloths, a part of the dress of *Tumbirans*, or ascetics. One day the god to try him, came disguised as a *Tambiran*, and asked for a cloth, which was given. The god put it down, asked the merchant to take care of it, and said he was going to perform *pujai* and would return. On coming back and asking for the cloth, it was not to be found; whereupon the ascetic showed another, and asked for one like that, which was promised: but this cloth, on trial, proved so heavy, that all the goods in the merchant's shop could not weigh it down. At length himself, his wife, and children, all were put into the scale; and then the god was pleased, and showed him favor.

10. *Eribakta-nāyanar*, an inhabitant of *Cariyur*, vowed to slay any who were traitors to *Siva*. One *Sivacámiyandar* was accustomed every day to gather flowers, and then put them into a roll, covered with cocoanut tree leaves, and carry them to the fane. An elephant going to a river, one day mistook this green bundle for food, and seized it as such. *Eri-bakta* hearing of this act of treachery, in pursuance of his vow, slew the elephant. The god disapproved the slaying of an ignorant elephant, and restored it to life. At the same time he gave beatitude to *Eri-bakta* for his zeal.

11. *Yénādi-nāyanar* of the *Irza* tribe lived in *Yeyinur*, in the *Chola*-country. He taught the art of fencing to all who came to learn; and when he saw any one wearing *Vib'huti*, or sacred ashes, he always paid to him homage. An opponent in the fencing art, in consequence of a dispute about their skill, came daily and contested with *Yenādi*, but was always worsted. At length having recourse to stratagem, he put *vib'huti* on his forehead. *Yenādi*, seeing this mark, determined that it would be better to sacrifice his own life than to contend with such a one; and when he saw his adversary's sword ready to strike he stretched out his neck, and received a deep wound of which he died. The god was pleased at this act, and gave tokens of favor.

12. *Kannapar*, a *védan* (forester) of *Udupur*, was a devotee of *Siva*. In the mistaken exercise of his devoteeism, he plucked flowers and leaves, and put them first on his own head in order to carry them for an offering; remains of savory flesh-meat of which he had partaken, he put into a plate, or cup of leaves, and carried this in his hand; and when, in performing the homage, he was removing the flowers, *etcetera* of the former day, he pushed them aside with his feet which had shoes on them, and for cleansing the image made use, instead of water, of his own spittle; he afterwards offered the flesh-meat which the god eat up, and then to try the zeal of the votary, appeared as if wounded on one eye. *Kannapar* seeing this wound plucked out one of his own eyes; and the god being satisfied returned him his eye, and gave him beatification.

Remark.—These few specimens may perhaps suffice to give an idea of the contents of this "great puranam." I have however looked over the whole; but have found nothing of more consequence; except the proceedings of *Sampantar* in the impaling of the *Samunas*, and the beatification of the wife of *Kuna Pāndiya*, for leaving the *Jaina* credence, and building a *Saiva* fane at Madura; the origin probably of that mode of worship there; for it is clear that before the time of *Mānica vāsacar*, the *Saiva* credence was not rooted in the south of the Peninsula of India.

Section 2nd. *Chola purva patayam.*

This is an incomplete copy, on paper, of the palm leaf Manuscript noted at the commencement of my second report. It is simply a copy: and comes down to a portion of the proceedings of *Samaiya Muthaliyar*. The remainder has the appearance of having been lost: through injury done to the book, by want of good binding. As regards this point the book is in bad order, but the first section being recopied, and the other existing in better form, the preservation of this document ceases to be matter of consequence.

2. Manuscript book. No. 7, C. M. 761.

Section 1. Account of *Pulicat.*

This is a very roughly written paper, which states that the country was formerly a wilderness, and was brought into order by one termed *Iresi*. It mentions the landing of the Hollanders or Dutch: their forming a settlement; their trade; their war with the Portuguese; and conquest of the place by the English. Some details are then added concerning the fishermen, who are numerous there; and the kinds of fish which they take. Some account of different kinds of residents is superadded.

Section 2nd. Account of *Tiru-palaivanam*, *Pomari* and *Gommadi-pudi*, villages in the district of *Madurantacam.*

In this section a few historical references to the *Chola* rule occur; though it chiefly relates to fanes, and their allowances. Mention of a *Jaina* fane occurs. In consequence of the extreme carelessness of the writing I had a copy made; though it is but of minor consequence.

Section 3. Actions of former *rājas* of the *Pandya*, *Chola*, and *Tonda* kingdoms.

In this section there is given an account of the old Madura kingdom; of the Chola kingdom, and the formation of the *Tonda* principality.

The style of language shows it to be the composition of a Christian. It ascribes the formation of the Madura kingdom to a Colonist; maintains the actual marriage of Arjuna with *Alli Arasani*, daughter of the king. The large *Saiva* temple there is stated to have originated in the circumstance of a stone emblem of *Siva* having been placed over the ashes of an early king, according to modern *Saiva* custom; and this symbol it declares to have been subsequently worshipped as a god.

The formation of the Chola kingdom is ascribed to one *Nalle*. The chief portion of that account is the narrative of the birth of *Adondai*, the illegitimate son of *Koluttunga-Chola*; and then follows some particulars of the formation of the *Tonda-mandalam*.

The contents closely harmonize with those of palm leaf MS. No. 241, C. M. 66, entitled *Tonda-mandalam*, *Chola-mandalam*, *Panda-mandalam*, *Kyfeyut*; and though that book is out of my hands, while writing this, yet I pronounce this section a copy of that one. It is a document that has been the subject of some discussion: and I may refer to the notice of the said MS., just before given.

This section is well written, on good paper, and in perfect preservation.

Section 4. Remarks on the limits of the *Tonda-mandalam*. Merely two pages of writing, the subject of which has repeatedly occurred.

Section 5. Account of the fane of *Kodi-mudi* in the *Tonda-mandalam*.

Merely a local legend commencing with the tale of a quarrel between *Vayu* and *Adisesha*, of frequent recurrence, and giving a fabulous tissue of invention down through the four *Yugas*, or ages.

A little damaged, but of no consequence.

Section 6. Account of kings of the *Cali-yuga*.

One page of names, beginning with the son of Abimanyu, and coming downwards, without coherence through the *Rayer* dynasty. I see on the page a pencilled word written by me some years ago—"anachronical;" which on re-perusal seems quite enough. It is worthless.

General Remark.—The whole contents of this book have now been examined: Section 3 being the only document of value, and that a duplicate of a manuscript; the facts stated in which are of very dubious authenticity. The book is in very tolerable preservation.

3. Manuscript book. No. 10, C. M. 764.

Section 1. Account of the fane of *Chacra-puram* in the *Chetapet* district.

Reference to the sacrifice made by Brahma at Conjeveram, and the birth of the *Varada Raja*; the form of *Vishnu* worshipped there. Matters relating to that place, with an especial notice of Mahomedan inter-

ference. The fane in question was built in a place formerly a wilderness; after it had been cleared. The whole is of the slightest possible value.

Section 2. Account of the fane at *Singhapuram,* in the same district.

A fane of *Rangha-nayaca,* a form of *Vishnu.* It refers to the combat of *Durga* with the *Asuras,* and trampling on the head of one of them: and there is a little other inane legendary matter. An image was found in a cavern, and a king or chief had a fane, and shrine, built for its accommodation.

Section 3. The *mahatmyam* (or legend) of *Tirunamalai* (or *Trinomali.*)

Inquiry by *Marcandeya rishi,* and reply; represented as given by *Siva's* vehicle *Nandi:* occasion is taken to relate the origin of the *Trimurti,* according to the *Saiva* system. The work of Brahma is creation; and, especially as effected by *Dacsha,* it is narrated. The origin of the celestials and others from *Casyapa.* Subsequently occurs the dispute for pre-eminence between *Brahma* and *Vishnu;* and the ordinary legend of the image at *Arnáchalam,* or Trinomali. The matter is taken from the *Trinomali st'hala purānam,* heretofore abstracted.

Section 4. Legend of *Kilur* or *Kirzaiyur* in the district of *Tirucovilur.*

The statement in this section is vague, and entirely legendary; being evidently based on mere invention.

Section 5. Account of *Tirucovilur,* in the district of the same name.

Account of the fane of *Trivicrama.* The legend of *Vishnu* in the *vāmana avatāra:* applied to localities of this neighbourhood.

Account of the fane of *Srinivasa Svāmi.*

A legend founded on the fable of *Siva* going about begging, and being entertained in the house of a Brahman. It is of frequent occurrence.

Section 6. Account of the *Saiva* fane of *Arakanda,* in the *Tirucovilur* district.

Legendary statements of penance performed by different gods, and goddesses, in the four ages; receiving what they wished. Some tales of the five *Pāndavas,* and of a cave in which they are said to have cooked their food. By way of the same cave they are stated to have gone to *Ramèsura.* [There is no limit to *Brahmanical* invention.]

Section 7. *Vallāla rāya-cherita,* or story of a *Vallāla* king.

This is a narrative, in two parts, relating to the *Vallāla* prince, who became a convert from the *Jaina* to the *Saiva* system. The first represents him as holding discourse with *Saivas,* being himself a *Jaina;* and the second describes him as a *Saiva* proselyte. The whole is written in *dvi-pada* metre, and is to be regarded as an *exparte* and sectarial document, drawn up with a favorable view to the *Saiva* system. The mere fact of such a change may be historical:* all the rest may be taken for as much as it is worth.

* See translation of the Congu-desa-rajakal.

General Remark.—Except the first section, and a small part of the others the contents of this book were found to be written with ink greatly faded, and on perishable paper, already injured. These things indicated restoration, omitting only the first section. The restored matter is however really of but little value. The last section might merit translation in reference only to modes of credence.

4. Manuscript book. No. 13, C. M. 767.

Section 1. Account of *Malla-raya*, and of *Annama-deva-rayar*, who came from *Vijayanagaram*, and settled at Arcot.

The account herein given appears to be for the greater part traditional. It narrates the visit of the wife or queen of *Deva-rayer* to Conjeveram, and some immunities procured by her influence. Of a shrine, in question, nothing now remains but the neglected image. The *Malla* tribe of athletics came from the Vijayanagaram country, and settled in and near, Conjeveram. *Malla*, one so called, distinguished himself in combat, single handed, with a tiger. The new inhabitants did not always accord with the older residents. With these outlines details are connected of moderate interest and importance; as to the filling up, which all matters of history require.

Section 2. Account of *Vamanātha-puram*, or the old *Mailapur* (St. Thomé.)

Anciently this town was wholly inhabited by *Jainas*, who had a fane with an image of *Nemi* or *Alli-Tirt'hacara*. One of these sages had a dream in which he was informed that, within a few days, the town would be overwhelmed by the sea. The image was removed further inland; and three days after the old town was swallowed by the sea. The *Jainas* appear afterwards to have had fanes, with many images in each, in a town which was called *Mailamánagara*. Another night vision announced the submerging also of this town, within three days, connected with a command to remove the image further inland. This command was obeyed. At a later period Brahmans came from the western *Chola* country; and, by superior skill in astrological and astronomical calculations, with their knowledge of the *At'harvana-veda* (or arts of magic) they succeeded in turning the people from the *Jaina* credence. The image was taken away by some of its votaries towards the west, as far as *Chitambur*. The paper adds that there is a traditionary statement current, in reference to the whole coast from *Mailapur* to *Mavalaiveram* (or from St. Thomé to the seven Pagodas) as to extensive ruins of a town, or towns, buried beneath the sea, and partially visible, in sailing over the site.

Note.—This paper is deserving of some special attention. Its defect is that it rests only on tradition.

Section 3. A list of *Jaina* books, in the monasterium at *Chitambur*.

This list of Sanscrit and Tamil books does not require any fuller specification.

Section 4. Account of the derivation of the *Saiva*, *Bauddha*, and *Vaishnava* systems, from the *Samuna*, or *Jaina* mode of credence.

This brief section contains simply an assertion that the *Saiva* mode of credence, and the *Mādhava* class of *Vaishnavas* were derived from the *Jainas*. As an assertion it may be weighed; but it does not appear to be supported by evidence; and I suppose was acquired from conversation with modern *Jainas*. There is added a mention of a few books, and their authors; usually considered to have been composed by them. Among them I observe the *Ullamadaiyan* ascribed to *Ullamadaiya cavesvara*.

Section 5 and 6. Account of the succession of ancient and famous *Jaina* sages.

In these sections there is a list of *Tirt'hacaras* and others, inclusive of poets, and other authors, and persons who filled the office of religious instructors. The document is of some value, in stating the *Jaina* view of the subject. It gives by inference a very recent origin to the *Caliyuga:* that is about 400 years antecedent to the Christian era. The list of authors must be received with circumspection, in as much as it ascribes the *Calingatu Parani* to a *Jaina* poet; which from its strongly *Saiva* character, I should think could not possibly be the case. Being copied, the whole section can at any time be made matter of reference.

Section 7. Representation of the *Jainas* respecting their sacred buildings, &c.

In this paper it is stated that there are many *Jaina* fanes in the Carnatic, which are in ruins, or gone to decay; and some account is given of the various molestations suffered by the *Jainas* from their neighbours. In particular, it is mentioned, that *Madhangan*, a ruler of *Chenji*, threw down, or distroyed many of their edifices, and decapitated great numbers of the *Jainas*. The paper closes with a request to the Surveyor General of India (Colonel Mackenzie) to rebuild, and repair the decayed, or ruined temples.

Section 8. Account by *Tiru-vakari*, in the *Varzutavur* district, of a remarkable image, and of *Vacra* a *racshasa*.

This title I collect from the paper containing the section heading in the book. It is a wildly legendary statement. There is a very large stone image, in the human form, in a recumbent posture. The account of its origin is, that it was once a tree, and that a sage passing by who was hungry, being disappointed in finding no fruit, doomed it to become stone. In the same neighbourhood a *rācshasa* termed *Vacra* built a residence: and certain streams, that now flow with a reddish colored water, are said to contain his blood, after he was killed.

Remark is superfluous; except that the image is probably one of those gigantic ones, met with occasionally in different parts of India.

Section 9. Boundaries of the *Chera*, *Chola*, *Pandya*, and *Tonda* countries.

A verse relative to each. This subject has often occurred.

Section 10. Account of the origin of the fane of *Kudimalur*, in the *Caveri pakam* district; and of ancient rulers.

The formation of the building is ascribed originally to the *Curumbars*; and some fluctuations of power, inclusive of the rule of one of the *Malla* tribe, and of the Mahomedans, are stated.

The paper has a measure of local historical value.

Section 11. Account of the rulers of *Candi* in Ceylon.

A reference to *Rāvana*, and an inundation after his time, which destroyed all his towns, &c.; it is then stated that the *Pandyan* kings formed a settlement on Ceylon. Next follows the ordinary legend of a lion carrying off the king's daughter, and having offspring, afterwards crowned king of Ceylon: the lion having been previously hunted, and killed. The legend is accommodated to the name *Singhala-desam*, (Singham being a lion) and the tale merely allegorical. It occurs in almost all printed accounts of Ceylon.

Section 12. List of *Jaina* fanes and books received from the hierophant at *Chitambúr* in the Jaghire. This is merely a list, quite meager, and uninteresting.

General Remark.—The paleness of the ink with which this book was written pointed it out for restoration; the last section being excepted. All the contents are traditionary; but from them something may be gained. The paper on the town of *Vāmanatha-puram*, or ancient *Mailapur*, is the most interesting. It contains the statement which a friend asked me to look for, having heard it from *Appavoo*, the servant of Col. Mackenzie, who got together, the contents of this book. The statement in question is that the *Brahmans* overcame the *Jainas* by superior skill in astronomical calculations. It is given however with less of fact and circumstance, than I expected; and is in part similar to a statement in other books, that the Brahmans overcame the *Jainas* by magical arts and incantations: *Saiva* documents would rather seem to indicate the free use of the secular arm.

5. Manuscript book. No. 21, C.M. 219.

Section 1. *Agastya Vyacāranam*, a grammar by *Agastya*.

This is a work on Tamil grammar with the name of *Agastya* prefixed; the genuiness of which I question. Agastya's work on grammar is generally considered to be now lost. This production is divided into four parts, 1. on letters, 2. on words, 3. on the union of words, 4. on government, or syntax. The fifth part, on prosody or versification is wanting.

The document breaks off abruptly, and by consequence remains incomplete.

Remark.—It fills the greater half of a thin folio on demy Europe paper, and remains in good preservation. I wish more at leisure to give it deliberate attention.

Section 2. *Desa-nirnayam*—or geography.

There are a few geographical boundaries stated; but the work is rather *chronological* containing the names and eras of *Ballala* kings and *Rayers.* A mention of the *Chola-desa*, and details of Mahomedan rulers. A list of the *mantris* or Hindu ministers of state, under the Golconda rulers, is given. A very brief mention is made, in general terms, of the boundaries of the *Carnātaca*, *Pāndya*, and *Chola* kingdoms; with some geographical matters following. At the close there is mention of some royal donations to different fanes.

Remark.—The binding is a little loose; but the included matters are in good preservation.

6. Manuscript Book. No. 9, C. M. 63 and 195.

1. *Agastya-njānam*, the wisdom of *Agastya*. This is a complete copy of the hundred stanzas which form this poem. It demands no further notice at present: a palm leaf copy having been before adverted to.

Section 2. *Agastya Sargam.*

This section contains a copy of fourteen stanzas from the section of the *Vriddhachala-puranam*, entitled as above: respecting which it may suffice to refer to the abstract of that *puranam* already given.

Section 3. *Varuna Kulatipa.*

A poem by the said person having reference entirely to *Manmata* and *Reti.* According to a native explanation in English appended to the above title, it ought to contain "*morals*" (or lessons) "on the good conduct of the people." It is however a vapid, an inane, and incomplete production.

Section 4. *Chola-desa-purvica charitra.*

This production contains the hypothetical opinions of *Veda Nayak*, a servant of Colonel Mackenzie; and states his replies to objections started by the Colonel, against his system; which replies are not always satisfactory. It was once my intention to notice this document fully, because of the consequence ascribed to it by Professor Wilson. But perhaps the best treatment would be translation, and printing in some one of the periodicals of the day. The doing so with a few brief notes, would at once adjust its value; which, for my own part, I do not highly estimate.

Remark.—This book is in unusually good preservation, and will long last for reference, if need be.

7. Manuscript Book. No. 14, C. M. 907.

The two first sections in this book are in the Telugu language.

Section 3. Account of the different tribes of *Malayalam* Brahmans.

Section 4. List of people of different tribes in the *Malayalam* country.

These two papers are connected. The first gives details concerning

the different tribes of Brahmans and of tribes only a little inferior; the offspring of Brahmans and the higher castes. Most of these distinctions have been before fully abstracted, or attended to, from preceding documents. In the other section servile tribes are enumerated.

Not less than two hundred distinctions of tribes, and names, are specified.

8. Manuscript Book. No. 60, C. M.

Ancient inscriptions in the *Malayalam* country.

One or two relate merely to the building of a fane, by the sons of a Brahman. One follows, which dates the reign of *Vara-Kara Pandiyan* in Sal. Sac. 1377. (A. D. 1455.) Another is S. S. 1468, a gift by *Vara-guna Pandiyan* to the shrine of *Crishna.* A gift by *Adi-vira-Pandyan* has merely the 18th year of his reign. One inscription is dated in the 42d year of the *Collam* era, commemorating repairs of a fane by a private individual. Some details are given as to *Bhagavati*, a local goddess, with reference to a passage-boat, heretofore abstracted from another book. Another legend is contained as to blood drawn by whetting a sword on a stone; over which stone a shrine was afterwards built, and it was worshipped as divine. Notices of the *Congani*, who *immigrated* hither from *Concan* near *Goa.* Mention of donations by *Kula Sec'hara Perumal*, to a shrine of *Crishna.* Details of a local goddess, with lists of expenses at festivals. Some reference to Mar Thomas, who by sanction of *Cheruman Perumal*, taught religion. Then a reference to *Rama-raja*, and gifts received from the *Cochin-raja.*

A return to the reign of *Vara-guna Pandiyan*, dated in *Sal. Sac.* 1467. (A. D. 1545.) *Vira Paracrama Pandiyan* is placed in S. S. 1470, a gift of land was made by him. The name of *Sundara Pandiyan* also occurs. (From the dates I think these must be the illegitimate sons of the *Pandiyan ;* referred to in accounts of that period.)

Remark.—There appears to be nothing in this book of higher date than the middle of the 15th Century; and these dates are not apparently of consequence. If I could suppose that these *Pandiyans* were those of like names who figure in the history of the Madura kingdom, the case would be otherwise. The book is in tolerable preservation; and there is nothing claiming restoration.

9. Manuscript Book. No. 23, C. M. 195.

Siva jiryāna Sactiyar urai, a moral work.

The instructions given, are stated to be from *Siva* to *Nandi.* The poetical original is accompanied by a prose explanation termed *urai.* The subject is the *Tatva* system, delivered in Sanscrit; and translated into Tamil, by *Mekanda-devan* of *Venne-nellur.* The five elementary principles in the human body, their combinations and effects are stated. The mental faculties acquire strength, with the growth of the body, and decay as it decays.

Renunciation of all sensual affections, attachments, and earthly passions, renders the human nature divine. Future transmigrations derive their character, and degree, from the degree of merit, or demerit in a previous state of being. These are a few of the outlines of the production; which is not complete in this work. The paper is exceedingly good, the ink a little pale in some places, but quite legible.

10. Manuscript Book. No. 3, C. M. 757.

In this book there are genealogical accounts of five *Paliya-carers*, or local chieftains of the *Coimbatore* and *Dindigul* provinces; with a genealogical notice of the ancestors of a *Brahman*, Manager of a fane in that neighbourhood; and some topical notices of a few places thereabouts: but the book is here adverted to, on account of the first paper, which possesses to give an account of early aboriginal rulers at Pyney. The names appearing to be purely native, and not Sanscrit epithets. I am doubtful of the authenticity of the account, but think that it may be returned to, and investigated at leisure. Another section contains an account of the *Cuneivār*, a wild-tribe; named from living on *Cunrukal* (hills) who are of the class of mountaineers, already repeatedly adverted to. They dwell on the *Panri-mali*, and other hills, of the *Virupacsha* district. Their manners and customs very much resemble those of the other Travancore mountaineers, which have been heretofore stated. Their women are never allowed to wear white clothes; and one custom in reference to them is peculiar; which is that any woman guilty of adultery is said to be adjudged to be cast headlong from the top of a rock, and that the sentence has been repeatedly put in execution. The section giving an account of this people is in *Telugu.* The other contents of the book are in Tamil. It is in very good preservation, and on the points noted as meriting further attention, as well as in the details, concerning local chieftains, can at any time be referred to, as being likely to last uninjured for many years.

Manuscript Book. No. 1, C. M. 47.

Palani Puranam, the legend of Pyney.

From this very large book 13 sections were abstracted in my fourth report, and 5 others, down to section 18, in my fifth report.

Section 19th legend of *Siva giri* and *Sacta giri*. *Siva* and *Parvati* were transformed into two mountains. *Vyasa*, cautions *Suta rishi* not to tell the secret of these mountains. The birth of *Subrahmanya* is narrated. When *Sura-padma* the *racshasa* disturbed the gods, six sparks issued from the frontlet eye of *Siva;* these he gave in charge to *Ganga*. The six sparks became six children. They were nourished by six females, forming the six stars in the *Critica Nacshetra* (*Pleiades*). *Parvati* took these six children, and by holding them close together the bodies were united, the heads only remained distinct. (Hieroglyphic for a great bodily prowess, and superior intellectual faculties). When yet a child *Subrahmanya* went to *Ganda mātanam* hill near to *Pyney.* All the gods, *Brahma* included,

came to do him homage. *Subrahmanya* asked *Brahma*—'what is your business?'—'To create.' 'By what?' 'By the *Vedam*.' 'What is the womb, or birth, of the *Vedam*?' *Brahma* replied—'O'M.' 'What is the originating cause of O'M?' *Brahma* did not know. *Subrahmanya*, waxed wroth, kicked *Brahma* for his ignorance; and ordered him to be imprisoned. In the interim *Subrahmanya* took on himself the work of creating. *Vishnu* and *Indra* went to *Kailasa*, and represented to *Siva* that *Brahma* was suffering. *Siva* sent his vehicle *Nandi* to go and tell *Subrahmanya* to release *Brahma*. The young god frightened *Nandi*. *Siva* mounted his car, and went to *Subrahmanya*, who received him with all respect, but refused to release *Brahma*, charging him with pride, and changing the trisyllable O'M. At *Siva's* further intercession *Brahma* was released and asked pardon. *Siva* bade him go, and do his wonted business. *Siva* then fondled the child, and inquired if he knew the meaning of the mystic syllable. The other said it was too great a mystery to be told before the assembly. *Siva* bent down his ear, and the other spoke into it. *Siva* asked how he became acquainted with the matter; and, being satisfied in that particular, returned to *Kailasa*.

The speaker next proceeds to tell the meaning of *Siva-giri* and *Sacti-giri*. One day *Agastya* went to *Kailasa* when the *rishis* asked him concerning the form of *Agnesvara*, or *Siva* and *Sacti*. He meditated a short time, and then went to perform penance. *Siva* came and asked him what he wanted. He replied—'if you and *Parvati* become visible in the shape of hills, then the *rishis* and others will do homage, and obtain bliss.' *Siva* said near *Gandu-māta-giri* are two hills. They are our form. Let them be worshipped as such. He gave to *Agastya* two peaks from the hill *Kailasa*, who took them as far as *Cāsi;* and there, leaving them, came to the *Potaiya* mountain *(Courtallam)*. How those two peaks were brought alongside of *Ganda-mata-giri*, is the subject of the following Section.

Section 20. The manner in which *Siva-giri* and *Sacti-giri* came to *Tiruvaven-gudi.*

Idan-asura had been preceptor to *Padmasura* in teaching him the use of the bow. After the death of the *asuras* the former came and did penance at *Pyney;* and when *Agastya* was returning, as aforesaid, *Idan* paid him homage. *Agastya* directed him to go to the north, and bring the two mountain peaks hither. A long description follows of intermediate places, especially *tirt'has*, or bathing places. *Idan* went and took up the two peaks, in the *Cāvadi* fashion (yoke and pails) on his shoulders: but he forgot, or mistook the road, and came by another way: that is by way of *Calahasti* and *Tiru-mali*. He proceeded as far as *Pushpa-giri* (flower hill), and thenceforward did not know the way. *Subrahmanya*, in the guise of a hunter, met him. A mutual explanation took place, *Subrahmanya* gave him directions to go by way of *Tiruva-*

vānengudi. He went so far, when feeling faint, and being both hungry and thirsty, he put down the two mountain peaks, without going on to *Poteiya.* He scooped out a tank with his hands, and being refreshed by the water, was about to take up the two mountain peaks; but found he could not do so. They remained fast. Being angry he inquired who had lessened his strength, and he climbed up *Siva-giri* in order to see. At the top he saw *Subrahmanya* like a little child. He came near, and some discussion occurred. *Subrahmanya* told him the mountain was to stay there: if he thought otherwise he might take it away, if he could. The *Asura* became angry. A battle resulted, and *Subrahmanya* slew him. A snake had formed the ligatures of the *Cāvadi.* It went and told *Agastya* what had happened. The *asura's* wife who had accompanied him to prepare his food hearing a noise went up the mountain. On seeing the state of the case, she uttered lamentations, which are written, being what is termed *Mangala-pichi,* a prayer to consider the state of a wife. In reply to her plaint the *Asura* was re-animated, and rose up. He then enlarged in praises of the god, and on his own happiness in meeting with him: requesting to be allowed always to remain on that hill, and to do service. *Agastya* came and congratulated the *Asura* on the privilege which he had acquired, and then went away. But *Idambaren* remained and did service. [There is a building called *Idambara kovil* at Pyney.]

Section 21. A legend concerning *Agastya—Agastya* and other *rishis* were in a certain place together: when *Nareda* came; and in the course of conversation said that the Being who was the first cause of all things ought to be worshipped. The *rishis* thought *Agastya* to be first and chief. On which *Veda Vyasa* became angry, observing that *Nareda* spoke not of him, but of *Sarasvati. Agastya* asked if he meant to insult *Isvaren,* by whose aid he had compiled the *Vedas,* and being angry went away to *Potaiya* hill. The *rishis* wished to see what would occur between *Vyasa* a devotee of *Vishnu,* and *Agastya* a follower of *Siva. Agastya* did penance at *Durga-puri.* The story of the image there is this. A *Brahman* woman named *Indri,* and her husband named *Murkāli,* being without children, the woman reared an ichneumon. At length she had a child, and she one day left the animal in charge of it, while she went to draw water. A snake approached the child, which the *Kiri-pillai* killed, and then ran out to meet the child's mother; who seeing its mouth to be bloody thought it had killed her child, and killed it; but on coming in, and seeing the true state of the case, she was about to kill herself, by swallowing the venom ejected by the snake. *Isvari* appeared, and told her not to do so; adding that the ichneumon, in a former state, was her own mother, and the snake a wicked king, who had killed her father and was born a snake. *Isvari* told her not to be sorry, and in her sight entered an image. After some time both the husband and the wife died. The said image was afterwards called *Nagilesvarer.* The earth in the shape

of a cow, and the snake *Adhi-seshan* came and worshipped it. Hence it came to be called *Nāgilesvara* of gladness. *Agastya* worshipped there five days; and was then told to go and do homage before another image.

Subsequently *Subrahmanya* taught *Agastya* the Tamil language; and a detail is given as to the *Sanscrit* letters retained, and those rejected. *Agastya* returned to *Potaiya*, and there composed the first Tamil Grammar.

[A disciple of *Agastya* composed the *Tolcapiyam*, which *Pavanandi* reduced by abbreviation to the *Nannul.*]

Section 22. Legends of the *Tir'thas*, or bathing pools.

The names, and situations, of the various pools are given; together with a statement as usual in *St'hala-purānas* of the particular merit and connected reward relative to each one of them; especially the *Brahma tirt'ha.*

This latter subject is illustrated by a tale. A Brahman died; and his son named *Punya murti* resolved to take his father's bones to *Casi* (Benares.) On his way he came to the sacred banks of the *Vaigai* river at Madura; and there performed certain ceremonies. Going thence to the *Congu* country, in order to see the *Caveri*-river, he met, by the way, a *Brahman* who advised him not to go to *Casi:* for if his father's bones could be turned into flowers it would suffice; and then his father's soul would attain beatitude. The *Brahman* proceeded to state that there was a place where this change might be effected; and narrated the story of a Brahman who had associated himself with those who robbed and plundered travellers, when passing through the *Palavanam* or forest. This robber named *Piriyan* died, and his body remained exposed in the forest, being devoured by jackalls, dogs, and vultures. An eagle took up one of the leg bones, and while flying with it through the air, owing to its weight let it drop into the *Brahma tirt'ha* near to *Siva-giri.* The bird then stooped in order to catch the bone, which last became suddenly changed into flowers; and from the mere circumstance of the bone having touched the sacred water, the soul of the robber, which had gone to *Yama's* hell, was released and obtained beatitude: while the eagle, from its having touched the sacred water with its beak, or talons, suddenly became changed into a divine form, and obtained beatification.

The Brahman proceeded to relate the story of another robber, whose bad dispositions and conduct are described, and who even went so far as to steal the jewels with which the idol *Subrahmanya* was especially decorated on the night of Siva. Being taken it was thought advisable not to kill him with any weapon; but being tied hand and foot, he was cast into the *Brahma-tirt'ha,* on the presumption that he would there be drowned; but he succeeded in disentangling himself, and when the people were gone away, he came out and went into another district or country. Being unchanged in character, he there continued his predatory proceedings; and in course of time dying, he re-

ceived beatitude, by virtue of his compulsory bathing in the pool aforesaid. 'The conclusion from these two tales,' continued the Brahman 'is, that since those two wicked ones received such benefit from the *Brahma-tirt'ha*, its efficacy exceeds the power of human-description.' The young man *Punya-murti* accordingly carried his father's bones thither, and put them into the pool; and they immediately became blue lotus flowers. The young man was astonished; and the soul of the *Brahman*—who when alive had performed many austerities—obtained beatitude.

The names and situations of other pools, with their efficacy and the reward for bathing in them, are specified. Legend of an image. *Parvati* once came to *Siva-giri*, and told *Vāyu* (god of wind) to go and bring a small image from *Cailasa*, which was promptly done. She then paid it homage. *Siva* came, in the form of an old man, with a staff, and asked for food, which she set before him. He then resumed his own form, and asked what gift was wanted. *Parvati* requested that all *Brahmans* might always have plenty of good food; the boon was accorded.

Next a *Siddhar* (magician) came. A tale is told of his quarrel with another *Siddhar*. *Nareda* being present directed them both to exhibit their skill. One changed himself into a fish, and the other one changed himself into a heron. They were afterwards reconciled. Two of the pools hence derived their names; one that of the fish; the other one that of the heron.

Transition to the narrative of a *Cheran*, the subject of the following and final section.

Section 23. Legend of a *Chera-kôn* (or king.)

There was a *Chera*-king whose head only bowed to *Siva*, whose eye only looked on the god of *Chitambaram*, whose arm was only employed in testifying homage to *Siva*, whose feet only walked round the walls of his temple; who wore no other jewels than the beads consecrated to *Siva*. This king went to *Chitambaram* (Chillambaram.) He had an interview with the *Chola* king; and with him visited the *Saiva* temples of the country. They then proceeded together and met the *Pandiyan* king. The three then went together to *Pyney;* where three Brahmans gave them an account of the bathing places. The *Chera* caused an image to be put up in his own name. A formless voice was heard declaring that the god *Subrahmanya* resided there. Afterwards the said god appeared with a staff; and the *Cheran* begged leave to build a temple to him: permission being accorded the god disappeared. *Visvacarma* became manifest; and was directed to build a temple, which he did, representing the appearance of the god with a staff. The temple was very beautiful. The god was represented standing with a staff in his hand (in other places, *sitting*.) Afterwards the other gods *Vishnu*, *Indra*, &c. came and worshipped there. The *Cheraman* appointed, to these gods, various ornaments, and their praises are repeated. The *Cheran* is then represented, as enumerating head, eyes, hands, feet, &c. declaring that they are not truly such, unless

employed in doing homage to the god; that many thousand eyes were not sufficient to see him, nor a thousand tongues enough to praise him; adding the insufficiency of two eyes and one tongue. Finally he is made to declare that he would not continue to reign; but would abide at that place in order to serve the god.

The three kings afterwards went about the hill of *Siva-giri*, in order to see its other wonders, as before stated; and by this means a recapitulation is contrived, briefly repeating over preceding tales in the substance, as if narrated to the three kings. The *Chola* and *Pandya* kings returned to their own homes. The *Cheran* remained for some time, ruling over seven worlds; and in the end went to *Cailasa*.

Then follows the declaration that such as read over and examine the Pyney *St'hala purna* will receive benefit, benediction, &c. The name of the author poet is not given. The book closes as usual with salutations to the sun, to the clouds, and to kings.

REMARK.—I have been a little particular in this analysis; chiefly in consequence of the notice given by their local *puranam*, of the immigration of colonies from the north, and partly for the sake of the local details, I think it is shown that the *Chera* and *Congu-desas* were distinct; for if the *Caveri* river was in the *Congu-nad*, then *Congu* could not be the same with the *Chera-nad*, or Malayalam country.

The whole of the TAMIL manuscripts whether on palm-leaves, or on paper, existing in the Mackenzie Collection, when entrusted to me (in 1837-39) have thus in a consecutive series of papers been examined, analysed, and abstracted.

VII.—*Meteorological Observations at Madras.*

[The long interruption in the publication of the Journal has occasioned a hiatus in the series of Meteorological observations formerly introduced into each No. which Mr. Taylor, before his departure to England for the recovery of his health, kindly undertook to supply in the following paper. Henceforward they will appear regularly in succeeding Nos.]

The Meteorological observations made at Madras since the year 1840, (when they were last published in these volumes,) have been extended to every hour of the day and night, and have moreover been rendered more exact than heretofore by the establishment of an office immediately directed to the purpose, and by the supply of standard instruments of all descriptions, including an Osler's self-acting Anemometer. The details of the first five years of these observations have already been published, forming a very thick quarto

volume, and the remaining portion, to the end of 1847, are now being prepared for the press: under these circumstances and to meet the wants of the Meteorologist who has not time to consult the *details* of observations, I propose here to furnish *results only* for the period now in arrears, leaving it open to further consideration and discussion—as to what extent the Meteorological results for the future shall be given.

With regard to the Barometer, the observations which lay most claim to attention, are, without doubt, those made at the hours of maximum and minimum pressure. On consulting the hourly observations, the instances are comparatively so few in which 9h. 41m. and 3h. 41m. both A. M. and P. M. do not respectively represent these times, that no appreciable error will be committed in their adoption, accordingly the results given in Table I. which now follow, may be considered to represent the indications of the Barometer at its superior maximum and superior minimum respectively; the differences between these indications—the " Major diurnal Range,"—exhibit a uniformity in the several months which is at once interesting and striking; whereas the annual range as well as the time at which the maximum and minimum occurs, is, as might be expected to some extent variable—taking the mean of the A. M. and P. M. observations for each month we get

Mean Indications of the Barometer at Madras for each Month at Temperature of 32° *Fahrenheit.*

	1841	1842	1843	1844	1845	1846	1847	Mean.
	Inches	Inches.	Inches	Inches	Inches	Inches	Inches	
January.......	29·975	30·003	29·989	30·004	30·020	30·073	29.981	30·006
February.....	30·005	29·975	·970	29·988	29·971	30·018	.958	29·984
March........	29·880	·859	·888	·908	·925	29·918	.926	·901
April..........	·843	·795	·861	·803	·809	·840	.828	·826
May.........	·725	·704	·688	·690	·704	·751	.732	·713
June..........	·687	·658	·702	·663	·698	·709	.683	.686
July..........	·694	·690	·702	·717	·716	·723	.700	·706
August........	·772	·722	·754	·726	·736	·744	.742	·742
September.....	·743	·761	·783	·787	·822	·770	.744	·773
October........	·869	·870	·866	·867	·849	·783	.851	·851
November......	·911	·945	·926	·965	·982	·918	.934	·940
December......	·920	30·014	30·004	·926	·967	·966	.929	·961
Mean	29·835	29·833	29·844	29·837	29·850	29·851	29·834	29·841

Moreover I have compared each monthly mean with that corresponding to each hour, whence the deviations of the Barometer—from its mean state at each hour of the day being known, we can

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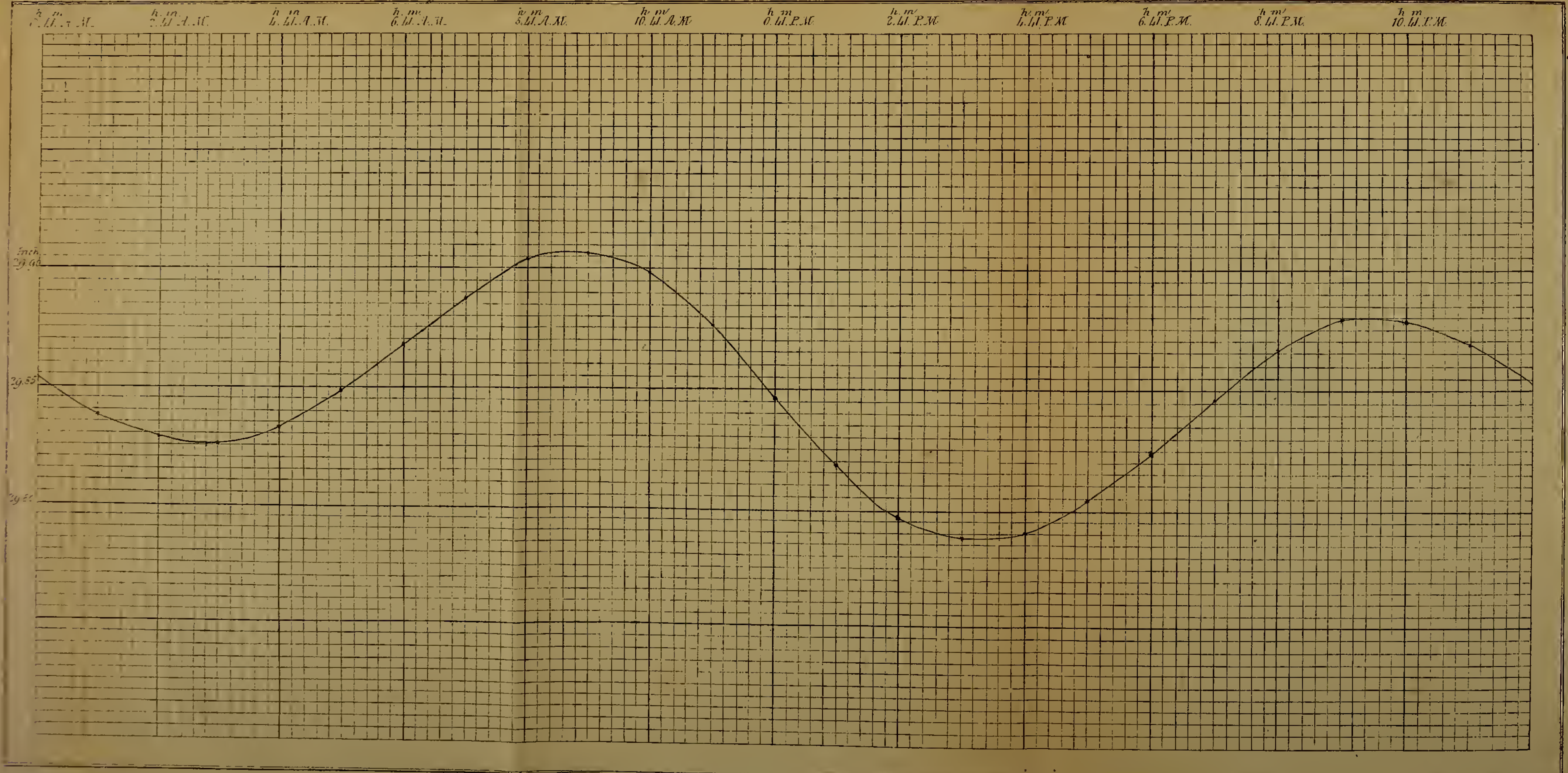
Barometrical Diurnal Curve at Madras.

Vol. XIV. Pl. 17.



with certainty at any time divest the reading of the Barometer of the immediate solar influence, and thus be able to say what the atmosphere effect alone amounts to :—these hourly changes will be rendered graphically intelligible by the annexed drawing, but will be more immediately useful, as exhibited in the following table :

Corrections to be applied to the Barometrical reading to reduce it to its mean Indication.

Mean Time.	Correction.	Mean Time.	Correction.
h. m.	In.	h. m.	In.
0 ·41 P. M.	+0·004	0 ·41 A. M.	−0·004
1 ·41 —	+0·032	1 ·41 —	+0·012
2 ·41 —	+0·053	2 ·41 —	+0·022
3 ·41 —	+0·062	3 ·41 —	+0·024
4 ·41 —	+0·060	4 ·41 —	+0·016
5 ·41 —	+0·046	5 ·41 —	+0·001
6 ·41 —	+0·027	6 ·41 —	−0·018
7 ·41 —	+0·001	7 ·41 —	−0·038
8 ·41 —	+0·017	8 ·41 —	−0·054
9 ·41 —	−0·029	9 ·41 —	−0·056
10 ·41 —	−0·029	10 ·41 —	−0·044
11 ·41 —	−0·019	11 ·41 —	−0·022

With regard to the thermometer, the mean of the hourly observations in each month, together with the mean maximum, and mean minimum Table II., is all that the present limits will admit. Instead of giving the indications of the wet bull thermometer as heretofore,—I have given (Table III.), a column exhibiting the *humidity* of the air with reference to unity (1), the point of perfect saturation. In this table too is given the depth to which rain has fallen as well as the amount of evaporation from a surface of water.

Table IV. exhibits the number of hours in each month (as derived from an Osler's Anemometer), during which the wind has prevailed from the N. W., S. W., S. E. or N. E. quarter, or has approximated to either of these, by which a fair estimate can be formed of the general direction of the wind ; in Table V., is given the *mean* as well as the *extreme* force of the wind as exhibited by its action on a flat surface of metal when disposed so as immediately to oppose its direction ; the numbers set down, represent the number of pounds avoirdupoise, with which the wind presses on a square foot of surface, these being derived from direct measurement by the Anemometer, are necessarily free from the uncertainty, to which personal estimations are liable.

Table VI. exhibits the result of the estimation of the amount of clouds covering the face of the sky (derived from the hourly observations), in which unity (1) would represent a sky completely covered with clouds: these observations are registered in eighths in the large volume already alluded to, but the decimal notation here adopted, will I imagine prove more convenient.

T. G. TAYLOR,
H. C. Astronomer.

Madras, February, 1848.

TABLE I.

Mean Monthly Indications of the Barometer at MADRAS, *at the times of* superior *Maximum and Minimum pressure during the Years* 1841-1847.

	1841.		1842.		1843.		1814.		1845.		1846.		1847.		1841	1842	1843	1844	1845	1846	1847
	h. m. 21. 41	*h. m.* 3. 41	*h. m.* 21. 41	*h. m.* 3. 41	*h. m.* 21. 41	*h. m.* 3. 41	*h. m.* 21. 41	*h. m.* 3. 41	*h. m.* 21. 41	*h. m.* 3. 41	*h. m.* 21. 41	*h. m.* 3. 41	*h. m.* 21. 41	*h. m.* 3. 41							
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.
January,.............	30,030	29,921	30,063	29,943	,042	,937	,061	,947	,076	,965	,131	,015	,042	,920	,109	,120	,105	,114	,111	,116	,122
February,............	30,062	,948	,035	,916	,031	,910	,047	,929	,031	,911	,079	,958	,022	,895	,114	,119	,121	,118	,120	,121	,127
March,..............	29,949	,812	29,922	,796	,952	,825	,972	,844	,988	,863	,983	,854	,992	,86[illegible]	,137	,126	,127	,128	,125	,129	,132
April,................	,908	,778	,860	,731	,928	,795	,870	,736	,878	,740	,903	,777	,893	,764	,130	,129	,133	,134	,138	,126	,129
May,.................	,784	,667	,767	,641	,743	,634	,749	,631	,763	,645	,809	,694	,796	,668	,117	,126	,109	,118	,118	,115	,128
June,.................	,746	,628	,715	,602	,761	,643	,721	,606	,752	,644	,767	,651	,740	,626	,118	,113	,118	,115	,108	,116	,114
July,.................	,756	,633	,755	,624	,762	,641	,779	,656	,775	,658	,776	,670	,756	,645	,123	,131	,121	,123	,117	,106	,111
August,...............	,833	,710	,786	,658	,816	,692	,788	,663	,801	,670	,801	,686	,799	,684	,123	,128	,124	,125	,131	,115	,115
September,...........	,806	,680	,822	,700	,848	,717	,851	,723	,884	,759	,834	,705	,813	,674	,126	,122	,131	,128	,125	,129	,139
October,..............	,928	,810	,931	,809	,924	,809	,929	,806	,910	,788	,842	,725	,912	,790	,118	,122	,115	,123	,122	,117	,122
November,...........	,970	,853	,999	,891	,981	,871	,021	,910	,033	,931	,976	,860	,988	,880	,117	,108	,110	,111	,102	,116	,108
December,...........	,977	,863	,072	,956	,059	,949	,980	,872	,021	,914	,020	,913	,978	,880	,114	,116	,110	,108	,107	,107	,098
MEAN.	,896	,775	,894	,772	,904	,785	,897	,777	,909	,791	,910	,792	,894	,774	,121	,122	,119	,120	,119	,118	,120
Probable Date of Max......	20th January		30th Dec.		30th Dec.		30th January		20th January		20th January		20th January		January 15th				Probable mean.		
Probable Date of Min.......	20th June		15th June,		15th June,		10th June,		10th June,		1st July,		1st July,		June 20th						
	Ins.		Ins.		Ins.		Ins.		Ins.		Ins.		Ins.		Ins.						
Annual range.........	0,316		0,357		0,316		0,340		0,324		0,364		0,302		,331						

TABLE II.

Mean Monthly Temperature at MADRAS, *as deduced from the hourly Observations, together with the Mean Monthly Maximum and Minimum Temperature, during the years* 1841—1847.

	1811.			1842.			1843.			1844.			1845.			1846.			1847.		
	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min	Mn.	Mx.	Mn.	Mn.	Mx.	Mn.
	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°			
January,......	—	—	—	77·0	81·4	70·8	77·6	81·3	72·9	75·7	81·0	68·9	76·8	81·9	72·0	75·7	81·1	69·4	75·8	81·8	67·9
February,....	—	—	—	77·9	84·2	69·9	77·9	83·2	70·8	77·7	83·3	70·6	79·4	84·4	73·9	78·9	83·9	72·4	79·3	84·1	72·6
March,....	82·0	87·6	74·5	82·4	88·7	75·4	81·5	86·6	75·3	82·2	87·8	74·4	83·1	88·2	77·5	82·2	88·2	74·6	81·5	88·4	73·1
April,.	84·9	91·2	78·4	85·7	92·2	79·5	85·2	90·7	79·6	86·3	92·9	79·9	86·6	92·4	81·6	85·8	92·1	80·1	86·3	93·2	78·9
May,....	86·8	95·4	80·8	88·1	95·8	82·6	85·0	90·9	80·5	87·0	94·7	81·8	88·6	97·6	82·6	87·3	94·8	81·2	87·6	95·2	80·8
June,...............	86·3	94·4	81·3	88·0	96·3	82·2	85·5	92·6	79·7	88·6	96·1	82·8	86·6	94·1	81·1	88·1	96·5	82·8	85·7	93·5	78·9
July,...............	86·8	94·7	80·8	86·7	93·6	80·6	85·8	92·5	80·3	85·8	92·9	80·5	86·1	94·0	80·8	85·1	91·4	79·0	84·8	92·4	77·7
August,....	82·5	89·1	78·0	84·4	92·1	79·1	84·5	91·9	79·2	85·2	92·2	80·0	85·9	93·8	80·3	84·9	93·0	78·8	84·5	91·2	77·8
September,..........	83·9	90·2	78·4	82·4	88·3	77·5	84·3	91·7	78·7	83·0	89·0	78·0	83·9	90·5	78·7	85·6	93·4	79·7	84·5	92·4	77·7
October,............	79·8	84·2	76·2	81·9	86·5	76·6	80·7	85·5	76·3	80·5	85·5	75·5	82·9	88·0	77·6	81·7	87·3	75·8	81·3	86·6	75·2
November,..........	78 3	83·1	73·2	78·3	82·3	73·6	77·8	83·2	72·2	79·2	84·6	73·9	79·1	84·5	73·2	78·5	83·1	73·4	78·6	84·9	74·0
December,..........	76·7	81·7	71·0	76·6	81·7	70·7	75·9	80·6	71·2	76·9	81·2	73·2	77·7	82·2	73·3	76·6	80·3	71·6	76·3	80·5	72·5
MEANS.	—	—	—	82·4	88·6	76·5	81·8	87·6	76·4	82·3	88·4	76·6	83·1	89·3	77·7	82·5	88·8	76·6	82·2	88·7	75·6

TABLE III.

Depth to which Rain has fallen, and amount of water evaporated from a shallow Cistern of water, together with the relative humidity of the air, for the several Months of the years 1841-1847.

	1841			1842			1843			1844			1845			1846			1847		
	Rain.	Evaporation.	Humidity.	Rain.	Evaporation.	Humidity.	Rain.	Evaporation.	Humidity.	Rain.	Evaporation.	Humidity.	Rain.	Evaporation.	Humidity.	Rain.	Evaporation.	Humidity.	Rain.	Evaporation.	Humidity.
	Ins.	Ins.		Ins.	Ins.		Ins.	Ins.		Ins.	Ins.		Ins.	Ins.		Ins.	Ins.		Ins.	Ins.	
January.. ..	0·057	8·416	—	1·705	6·318	·81	6·398	6·665	·79	0·674	6·494	·75	1.512	7·750	·76	2·937	7·423	·76	0·002	8·814	·74
February....	—	7·526	—	—	7·781	·74	0·025	8·585	·76	0·495	7·322	·75	—	8·002	·76	0·227	9·491	·76	0·217	8·811	·75
March.......	—	10·075	·78	0·254	10·617	·75	0·792	11·082	·76	—	10·112	·75	0·020	9·777	·77	—	13·795	·74	—	11·093	·74
April.......	0·411	13·320	·77	—	12·063	·77	0·036	12·216	·77	—	11·001	·76	0·043	11·793	·77	—	16·190	·74	0·454	12·479	·71
May........	4·340	14·880	·75	0·366	14·585	·67	14·066	10·360	·78	2·703	11·361	·75	1·520	13·959	·68	1·343	13·773	·73	0·725	14·678	·68
June........	3·913	15·180	·72	1·510	13·515	·64	1·933	10·266	·73	2·661	12·219	·67	2·359	10·758	·70	3·705	11·863	·63	3·792	9 398	·67
July........	1·565	15·903	·67	3·422	12·521	·64	1·391	9·635	·67	3·217	10·292	·72	2·901	11·609	·68	9·121	8·820	·71	3·092	9·944	·72
August......	8·785	10·695	·81	3·066	10·063	·72	2·203	8·891	·72	2·657	9·870	·73	2·014	11·055	·68	5·342	9·274	·73	9·712	8·605	·72
September..	4·215	9·360	·80	5·562	7·635	·81	4·141	8·577	·74	12·420	8·166	·79	4·095	9·357	·77	0·921	11·573	·70	5·869	10·280	·69
October.....	22·091	7·750	·90	7·993	7·552	·84	6·250	5·152	·83	13·503	7·118	·82	3·363	9·108	·77	30·585	6·999	·79	16·314	7·544	·81
November..	6·430	7·950	·81	12·329	5·913	·80	5·265	6·543	·76	3·669	8·151	·73	5·119	8·292	·74	19·390	6·398	·78	18·662	4·983	·82
December...	1·169	9·548	·79	0·190	7·731	·74	7·248	5·382	·79	2·323	5·211	·83	15·325	5·626	·85	6·895	6·258	·80	22·155	4·786	·80
Sums and Means.	52·976	130·603	·78	36·397	116·294	·74	49·751	103·354	·76	44·322	107·317	·75	38·271	117·086	·74	80·466	121·857	·74	80·994	111·415	·74

TABLE IV.

Direction of the Wind at MADRAS, *in each Month during the years* 1841—1847, *as exhibited by the number of hours during which it has blown from the N. W., S. W., S. E., or N. E.*

	1841				1842				1843				1844				1845				1846				1847			
	N.W.	S.W.	S.E.	N.E.	N.W.	S.W.	S.E.	N.E.	N.W.	S.W.	S.E.	N.E.	N.W.	S.W.	S.E.	N.E.	N.W.	S.W.	S.E.	N.E.	N.W.	S.W.	S.E.	N.E.	N.W.	S.W.	S.E.	N.E.
January......	—	—	—	—	105	51	80	508	74	29	92	549	64	47	193	440	87	27	196	434	160	0	91	482	142	64	130	408
February	—	—	—	—	95	121	227	229	23	82	434	133	45	92	309	249	11	71	393	197	21	138	417	82	42	63	272	281
March...... .	2	170	372	0	26	201	276	1	15	179	527	23	12	266	449	17	13	221	477	33	13	241	478	3	65	193	296	190
April	120	471	115	14	0	307	269	0	0	230	488	2	15	235	451	19	3	380	335	2	0	388	332	0	46	420	241	13
May..........	57	407	219	37	56	468	211	9	73	376	260	35	67	426	215	36	73	437	204	30	33	541	159	7	46	541	147	10
June	86	539	86	9	86	447	133	30	88	553	76	3	196	397	84	43	228	396	51	45	155	452	108	5	158	484	56	22
July	144	511	76	13	96	573	62	13	121	562	54	7	127	498	111	8	128	498	108	10	115	475	134	7	76	469	177	22
August	85	352	238	19	87	487	144	26	120	494	117	13	200	411	95	38	135	472	129	8	72	470	178	24	99	490	131	24
September.. .	115	356	182	43	91	377	174	78	153	355	168	44	114	359	187	60	93	371	228	28	133	324	231	44	134	407	147	32
October......	265	93	145	241	101	203	221	219	194	183	119	248	171	251	125	197	83	274	229	158	—	—	—	—	209	137	141	185
November....	232	16	58	414	139	16	34	531	194	2	11	513	236	0	51	433	96	0	66	558	416	62	26	191	123	28	98	471
December....	219	0	10	515	157	16	70	501	207	19	144	374	246	8	64	426	149	14	104	477	13	0	8	291	149	0	59	536
Sums	—	—	—	—	1039	3267	1901	2145	1262	3064	2490	1944	1493	2990	2334	1966	1099	3161	2520	1980	—	—	—	—	1289	3296	1895	2194

TABLE V.

Mean and Extreme Pressure of the Wind at MADRAS, *as exerted on a square foot of surface, during each Month, in the years* 1841-1847.

	1841		1842		1843		1844		1845		1846		1847	
	Mean.	Extreme.	Mean.	Extreme.	Mean.	Extreme.	Mean.	Extreme.	Mean.	Extreme.	Mean.	Extreme.	Mean.	Extreme.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
January	—	—	0·11	4·56	0·56	4·82	0·26	3·24	0·09	3·04	0·03	2·00	0·16	3·50
February........	—	—	0·16	4·56	0·49	1·68	0·17	2·07	0·04	0·81	0·05	1·25	0·14	1·15
March..........	0·24	3·68	0·12	1·58	9·36	3·72	0·25	2·06	0·12	2·03	0·14	2·00	0·11	1·60
April............	0·24	6·25	0·25	1·57	0·54	4·89	0·57	2·78	0·58	3·28	0·35	3·10	0·23	1·90
May............	0·53	13·20	0·38	5·85	0·69	7·50	0·49	6·33	0·33	6·05	0·23	2·00	0·49	2·25
June............	0·26	4·50	0·43	5·75	0·35	4·43	0·42	4·37	0·35	2·76	0·15	1·90	0·41	2·52
July............	0·33	4·85	0·71	5·32	0·30	2·36	0·34	4·45	0·33	3·01	0·10	1·45	0·29	2·25
August	0·12	1·45	0·28	3·45	0·26	4·28	0·18	2·25	0·24	2·92	0·04	0·95	0·20	3·50
September......	0·11	3·25	0·08	1·48	0·24	4·68	0·15	2·98	0·11	3·26	0·04	1·10	0·34	2·70
October	0·14	4·95	0·31	13·25	0·07	1·75	0·01	3·48	0·15	2·36	0·26	13·00	0·28	12·05
November......	0·12	3·20	0·25	4·25	0·47	5·58	0·32	4·08	0·37	2·68	0·34	26·00	0·21	3·60
December......	0·21	4·58	0·30	3·55	0·38	5·49	0·52	6·12	0·19	2·85	0·31	3·50	0·74	5·70

TABLE VI.

Mean per centage of Clouds covering the face of the Sky during the Day and Night in each Month, from 1841-1847.

	1841		1842		1843		1844		1845		1846		1847	
	Day.	Night.	Day.	Night.	Day.	Night.	Day.	Night.	Day.	Night.	Day.	Night.	Day.	Night.
January......	—	—	·49	·40	·72	·61	·43	·36	·36	·31	·59	·39	·36	·24
February.......	—	—	·36	·19	·35	·28	·30	·31	·35	·23	·32	·28	·51	·38
March..........	·26	·34	·49	·34	·45	·43	·26	·24	·43	·30	·19	·10	·28	·23
April...........	·45	·49	·30	·28	·45	·41	·17	·20	·21	·23	·28	·16	·31	·26
May	·64	·56	·71	·64	·66	·61	·56	·62	·54	·43	·31	·35	·40	·31
June......... ..	·65	·75	·72	·67	·72	·66	·65	·53	·70	·60	·67	·72	·76	·80
July...........	·78	·71	·84	·82	·91	·84	·86	·84	·78	·67	·71	·79	·76	·78
August....	·85	·86	·86	·84	·90	·81	·80	·85	·80	·69	·65	·61	·74	·59
September	·60	·57	·70	·72	·78	·74	·62	·62	·64	·60	·71	·60	·69	·64
October........	·82	·80	·59	·48	·79	·65	·53	·49	·56	·48	·61	·44	·66	·61
November	·61	·56	·64	·57	·70	·59	·54	·38	·57	·51	·69	·48	·66	·54
December	·66	·55	·48	·41	·65	·59	·81	·74	·75	·62	·75	·56	·73	·61
Mean....	—	—	·60	·53	·67	·60	·54	·51	·56	·47	·54	·46	·57	·50

A Table of Humidity—Argt. Dry Thermometer and Depression.

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
60	1·00	95	91	84	79	74	69	65	61	57	53	48	44	40	36	32		
1		95	91	84	79	74	69	65	61	57	53	49	45	41	37	32		
2		95	90	85	80	75	70	66	62	58	54	49	45	41	37	33		
3		95	90	85	80	75	70	66	62	58	54	50	46	42	38	34		
4		95	90	85	80	76	71	67	63	59	55	51	47	43	39	35		
5		95	90	85	80	76	71	67	63	59	55	51	47	43	39	35		
6		95	90	85	80	76	71	67	63	59	55	52	48	44	40	36		
7		95	90	85	80	76	72	68	64	60	56	52	48	44	40	36		
8		95	90	85	81	77	72	68	64	60	56	53	49	45	41	37		
9		95	90	85	81	77	73	69	65	61	57	53	49	45	41	37		
70		95	90	85	81	77	73	69	65	61	57	54	50	46	42	38		
1		95	90	86	82	78	73	69	65	61	57	54	50	46	42	38		
2		95	90	86	82	78	74	70	66	62	58	55	51	47	43	39		
3		95	90	86	82	78	74	70	66	62	58	55	51	47	43	40		
4		95	90	86	82	78	74	70	66	62	59	56	52	48	44	41		
5		95	91	87	83	79	75	71	67	63	59	56	52	48	44	41		
6		95	91	87	83	79	75	71	67	63	59	56	52	49	45	42		
7		95	91	87	83	79	75	71	67	63	60	57	53	50	46	43		
8		96	91	87	83	79	75	71	67	63	60	57	53	50	46	43		
9		96	92	88	84	80	76	72	68	64	61	58	54	51	47	44		
80		96	92	88	84	80	76	72	68	64	61	58	55	51	48	45		
1		96	92	88	84	80	76	72	68	64	61	58	55	51	48	45		
2		96	92	88	84	80	76	72	68	65	62	59	56	52	49	46		
3		96	92	88	84	80	76	72	68	65	62	60	56	52	49	46		
4		96	92	88	84	80	76	72	69	66	63	59	57	53	50	47		
5		96	92	88	84	81	77	73	70	67	64	61	58	54	51	48		
6		96	92	88	84	81	77	73	70	67	64	61	58	54	51	48		
7		96	92	88	84	81	77	73	70	67	64	61	58	55	52	49		
8		96	92	88	84	81	77	74	71	68	65	61	58	55	52	49		
9		96	92	88	84	81	77	74	71	68	65	62	59	56	53	50		
90		96	92	88	84	81	77	74	71	68	65	62	59	56	53	50		
1		96	92	88	84	81	78	75	72	69	66	63	60	57	54	51		
2		96	92	88	85	82	78	75	72	69	66	63	60	57	54	51		
3		96	92	88	85	82	79	76	73	70	67	64	61	58	55	52		
4		96	92	88	85	82	79	76	73	70	67	64	61	58	55	52		

VIII.—NOTICES.

Rhinoceros Oswelli.

A communication from Mr. Oswell subsequent to the publication of our last No. informs us that the native name *Chakúrú* which we had considered to be the distinctive *Bechuana* appellation of the white species (Rh. Simus) is in fact a generic title applied by that tribe to all the kinds. The specific term applied to Rh. Simus is *Mahohú*, that of the black or Rh. Africanus is *Boreali;* that of the new species or Rh. Oswelli, being *Quebaba*. The species described by Dr. Smith under the native designation *Keitloa*, Mr. Oswell considers to be merely a variety of Rh. Africanus. The name *Omagogoo* he

never heard. We obtained it from Captain Steele who penetrated nearly to the tropic in 1843.*

The Journal of the Indian Archipelago.

We desire to introduce to the notice of our readers a valuable and interesting periodical publication recently established in the Straits under the above title. The first number appeared in July last, since when the first volume has been completed and considerable progress made in the publication of the 2d. The numbers appear in a small monthly form which it is contemplated to exchange hereafter for a quarterly issue. The journal is to be especially devoted to the investigation of the British Settlements in the Straits of Malacca and of the Malayan Peninsula, but it will also embrace subjects connected with the whole Eastern Archipelago as regards their history, ethnology, statistics, antiquities, literature and natural productions. A large portion of the work is to be devoted to translations from the early Dutch and Spanish voyagers, and the rich mine of information contained in the Transactions of the Batavian Philosophical Society will be largely drawn upon.

The performances of the Editor are in accordance with the promises held out in his prospectus. We have original papers on the present condition of the Indian Archipelago, on Cochin China, on the ethnology of the Archipelago, on the laws of Siam ; with notices of many tribes and races such as the Binuas of Johore, the Mintera, Salimba, and generally of the tribes of the Johore group. The papers on natural history comprise the conchology of the Straits, the geology of Singapore and of the Malay Peninsula, a description of the gutta percha, an elaborate treatise on the use and abuse of opium, facts relating to the edible birds' nests, &c. But the most interesting communications to Indian readers are found in the notices of the extensive colonization of these regions by an ancient Hindu race, of which many characteristic features still remain. These are chiefly derived from the Tedjschrift von Neerlands India, but other sources have not been neglected. Among the papers derived from translation, we may instance that of a valuable memoir

* We take this opportunity of correcting an erratum in the map. For Benkarool read *Bonkapoor.*

on the Statistics of the Netherlands possessions in the Archipelago by the celebrated naturalist Temminck.

We strongly recommend this valuable publication to our readers.*

Hindu Remains in the Eastern Archipelago.

Throughout the Indian Archipelago, particularly among the true Malayan and Javanese races, marked and permanent traces of a Hindu civilization have been distinctly recognized in the language, manners and religion of the modern population, while the same character is still more permanently impressed on ancient edifices and other remains still extant.

The intolerant spirit of Islamism, now the prevailing faith of these regions, has had the effect of obliterating and rendering fainter the features of early foreign influence, but in one island that of Bali the Hindu religion has continued undisturbed up to the present time and that too, under its two most prominent and antagonist forms of Buddhism and Brahmanism, which are here seen still to flourish in peace and harmony, long after the deadly struggle for superiority has terminated in the annihilation of one or other of them in all the other places where they once co-existed. The few remains still extant of the ancient sacred language,—the Kawi,—in which the Hindu writings are contained—are so little known, as to be sealed books in Java, but it is hoped that not only will more numerous compositions be met with in Bali but also that a door will be opened for the successful cultivation of this ancient tongue. A favorable opportunity has recently been offered for prosecuting the researches commenced by Raffles and Crawford into the curious phenomenon exhibited by this little island, and the Dutch savans have not allowed it to pass. Advantage was taken of the recent invasion of the island by the Dutch Government to chastise the Rajah of Bliling,—to attach to the force, M. Friederich, a member of the Batavian Society of Arts and Sciences, with instructions to collect all Kawi and Balinese MSS., to obtain inscriptions either original or copied ; to trace the antiquity and history of the Kawi language and in particular to inquire whether it was derived from Java or from India ; to procure images and other articles illustrative of the existing religion; and to engage the services of a Balinese Pundit for the Batavian Society.

* The Agents for the work in Madras are Messrs. Pharoah and Co., and the annual subscription is 12 Rs. payable in advance.

The expedition having ended in establishing the Dutch supremacy over the island, M. Friederich has been enabled to prosecute his researches with great success. He has not confined his inquiries to Bliling but has extended them to other parts of the island and has sedulously occupied himself in the study of its ancient literature at Badong. The fruits of his labors he has promised to contribute in the shape of a comprehensive memoir on Bali in the forthcoming No. of the Tidjschrift von Neerlands India (the 22d), from which we trust it will early be transferred to the pages of our enterprising cotemporary.—*Abstracted from the Journal of the Indian Archipelago*, Vol. II. No. 3.

Extract from Mr. H. Low's work on Sarawak.

"Besides the trace of the Hindu religion," (in Borneo,) "which we have recorded, in the disposal of their dead by fire, other relics are to be discovered in their customs, particularly in that which induces them to abstain from the use of animal food of several kinds.

"From the prevalence of the indications in the influence of the Hindu religion, observed of their customs above detailed, we might suppose that the traces of its monuments in the arts of building and sculpture, so common in some parts of Java, might be also found here; but, as has been previously observed, it is probable that this and the neighbouring river of Samarkand, were the most eastern confines of its sway, and that the people were neither sufficiently numerous, nor zealous enough in the exercise of its precepts, to render it advisable to incur the necessary expense of bringing these things from Java, or of importing Hindu artists from thence. One positive monument of these people has, however, been found in Sarawak, though in a much mutilated state. It is the image of a bull, carved in stone, and in a crouching position, similar to one sketched in Sir Stamford Raffles's History of Java, Fig. 5, in the plate from subjects in stone, found near Singa-Sari, in the district of Maling, in Java.

"The Borneo specimen is too much disfigured to ascertain whether its trappings had been the same. This relic was much venerated by the Dyaks, who protested against its being removed, declaring that the country would be deluged by rain, and that other supernatural events would occur, if it were allowed to go out of the province. They were finally prevailed upon to permit its removal to Sarawak, by the

argument, that an object of such veneration should not be permitted to be exposed in the jungle, and that it should be placed under a shed in the town where it now accordingly stands.

" Two other objects, the workmanship of a people who had attained to some degree of skill in the art of working stone, have been discovered ; the one at a point of the river, about six miles above the town of Sarawak, called Battu Kawa ; the other on the Samarkand river, near Ledah Tanah, and called by the Malays, Battu Berala, or the Idol Stone.

" The Battu Berala, on the contrary, is highly venerated by the surrounding Dyaks, who suppose the slight elevation on which it is placed, to be the residence of some great spirit, in whose honor, once a year, the Dyaks are said, at this spot, to hold a great feast, bringing the pigs and provisions from their village for this purpose. I exceedingly regret that during the time I visited the stone, it was impossible to proceed further up the river, which becomes small at this distance from the sea, to learn from these Dyaks themselves the whole of the particulars concerning it. About the Battu Berala, one of which appeared to have formed part of the shaft of a column, but they were so broken, that nothing certain, as to their original shape or uses, could be gathered from these fragments.

" Though these stones are few in number, the image of the bull alone, and the veneration in which it and the Battu Berala are held, are sufficient evidences that the religion which introduced and used them, has had some influence in this part of the island.

IX. Proceedings of the Madras Literary Society and Auxiliary of the Royal Asiatic Society.

At a Meeting of the Managing Committee of the Madras Literary Society, on Friday Evening the 9th January, 1846.

Read a letter from Messrs. W. H. Allen and Co., dated 19th November, 1845. Advising the dispatch of books and periodicals per Steamer.

Resolved,—That the following works be ordered out from England for the Society :

Oliver Cromwell's Letters and Speeches. By Thomas Carlyle.

The Lives of the Lord Chancellors and Keepers of the Great Seal of England. By Lord Campbell.

The Diplomatists of Europe. Translated from the French of M. Capefigne. Edited by General Monteith.
Mrs. Heman's Works. Complete 7 vols.
Miss Landon's (L. E. L.) Works. Complete.

(Signed) T. C. JERDON,
Secretary M. L. S., &c.

At an Annual General Meeting of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, held at the Society's Rooms, at the College, on Saturday the 31*st January,* 1846.

The Honorable Sir E. GAMBIER, President, in the Chair.

The Secretary submitted to the Meeting an abstract statement of the Funds of the Society for the past year, exhibiting a balance in its favor of Rupees 400-3-2.

The Meeting then elected R. H. Williamson, Esq., a Member of the Managing Committee, in the room of Captain W. K. Worster, who is about leaving the Presidency.

The following donations having been made to the Society since the last Annual General Meeting, the thanks of the Society were voted to the donors.

BY C. P. BROWN, ESQ.

	Vols.
Wordsworth's Ecclesiastical Biography, - - - - -	6
Rotteck's General History of the World, - - - - -	4
Lives of the Norths, - - -	3
Picture of Greece, translated from Pausanias, by Taylor, - -	3
Harmonies of Nature, - -	3
Beattie's Elements of Moral Science, - - - - -	2
Sulivan's Tour thro' England, Scotland, &c. - - - -	2
Gregory's Christian Church, - -	2
Kanlitt's Life of Napoleon, -	4
Coleridge's Biographia Literaria, -	2
Roberts's Two Years at Sea, -	1
Colonial Policy applied to India, -	1
Stuart's View of Society in Europe,	1
Hamilton on National Debt, -	1
Hone's Ancient Mysteries Described,	1
Head's Narrative, - - -	1
Malcolm's Travels in S. Eastern Asia, - - - - - -	2
The Rolliad, - - - - -	1
Carlisle on Old Age, - - -	1
Things Divine and Supernatural, -	1
Harty on Dysentery, - -	1
Leake on the Viscera, - - -	1
Angus's Voluntary System, -	1
Wesley's Christian Pattern, - -	1
Select Papers on English Character, - - - - - -	1
Papers relating to Scheldt, Portugal and Spain, - - -	1
Fuller's Pisgah sight of Palestine,	1
Papers relating to the Portugal Convention, - - - -	1
Machiavelli's Works, - - -	1

	Vols.
Wilson's Missionary Voyage, -	1
Skrine's Tours in the North of England, - - - - -	1
Stock's Isaiah, - - - -	1
Walsh's Journey from Constantinople to England, - - -	1
Lord's Popular Physiology, - -	1
Woman, or, Ida of Athens. By Miss Orenson, - - - -	4
Woodstock, - - - -	3
The Fortunes of Nigel, - - -	3
Red Gauntlet, - - - -	3
The Pirate, - - - - -	3
Tales of My Landlord, 1st Series,	4
Do. do. 3d Series, -	4
The Monastery, - - -	3
Waverly, - - - - -	3
Antiquary, - - - -	3
Kenilworth, - - - - -	3
Ivanhoe, - - - - -	3
Rob Roy, - - - - - -	3
Peveril of the Peak, - - -	4
Quentin Durward, - - -	3
The Abbot, - - - -	3
Dunlop's History of Fiction, -	3
Oakwood Hall. By Catherine Hutton, - - - - - -	3
Six Weeks in Paris, - - -	3
The Spirit of the Book. By T. Ashe, - - - - -	3
Rousseau's Eloisa, - - -	4
Read and Give it a Name, - -	4
The Metropolis. By C. Hogg, -	3
Men and Women, - - - -	3
Ada Reis, - - - - -	3
The Prince or the Royal Libertines,	3
Robertson's Four Years in Paraguay,	2
Clarentine, a Novel, - - -	2
Saint Clair, - - - -	2
Argal, or the Silver Devil, -	2
The Cottage of Merlin Vale, - -	2
The Arts and Artists, - -	3
Dodsley's Poems, - - - -	6
Barrow on Education, - -	2

	Vols.
Greek Testament, - - -	3
Hill's Recollections of an Artillery Officer, - - - - -	2
Memoirs of Marmontel, - -	4
The Listner. By Caroline Fry, -	2
Peter Pindar's Works, - - -	4
Ward's Farewell Letters, - -	1
Hawker's Spiritual Gleaner, - -	1
Christmas's Universal Mythology,	1
Fleetwood. By Godwin, - -	1
Secker's Lectures, - - -	1
Walsh's Notices of Brazil, - -	1
O'Sullivan's Guide to an Irish Gentleman, - - - -	1
Boyle's Voyages and Adventures,	1
Autobiography, a collection of Lives,	1
Harriett's Struggles through Life, -	1
The Sorcerer, a Tale, - -	1
Villier's Works, - - - -	1
The Hungarian Brothers, by Miss Porter, - - - - -	1
Devil on Two Sticks, vols. 2 and 4,	2
Legends of the Lakes, vol. 2, - -	1
Kotzebue's Travels in Switzerland, vol. 1, - - - - -	1
Wilson's Letters from an Absent Brother, vol. 2, - - - -	1
The Private Hours of Napoleon, vol. 2,	1
Walsingham, vol. 2, - - -	1
Correspondence de Grimm, -	5
Le Comte de Valmont, - - -	6
The Phœnix, or the History of Polyarchus and Argenis, - -	4
Lettres de Sevigne, - - -	2
Graca Majora, - - - -	1
The New Gil Blas, vol. 3, - -	1
Le Diable Boiteux, - - -	1
Gibbon's Miscellaneous Works, vol. 1,	1
Read and Give it a Name, vol. 3, -	1
Davies on the Soul, (MS.) -	1
Abbot's Practical Analysis of the Letters Patent forming the Episcopal Charter of the See and Diocese of Calcutta, - - -	1

By M. Garein De Tassy.

Grammaire Persane de Sir William Jones par Garein De Tassy, - - 1 vol.

By C. J. Bird, Esq.

A large fragment of Meteoric Stone.

Fragments of Edible Birds' Nests.

By the Rev. W. Tracy.

A set of Earthen Vessels dug out from an old Sepulchre in the American Mission Compound at Madura.

By Major General W. Cullen.

A large box of specimens of Limestone, containing organic remains. (Vide Pro. of the Managing Committee of 9th December, 1845, Page 219.)

It was announced to the Meeting that the following Gentlemen have been elected Members of the Society since the last Annual General Meeting.

R. O. Campbell, Esq.
G. Thomson, Esq.
R. S. Ellis, Esq.
Captain Snow,
W. E. Cochrane, Esq.
Lieut. J. F. Johnstone,
Captain H. N. Noble,
Captain J. H. Wilson,
A. J. Arbuthnot, Esq.
A. W. Sullivan, Esq.
Clarence Roberts, Esq.

During the last year the Society has lost fifteen Members by retirement and departure for Europe.

The thanks of the Meeting were unanimously voted to the Honorable the President for his conduct in the chair.

(Signed) T. C. Jerdon, *Secretary.* (Signed) E. J. Gambier, *President.*

At a Meeting of the Managing Committee of the Madras Literary Society, on Tuesday Evening the 10*th February,* 1846.

Read the following letter from C. P. Brown, Esq.

To the Secretary to the Madras Literary Society.

Sir,

I beg to propose for the consideration of the Committee the expediency of reprinting some of the earlier Nos. of the Journal of the Literary Society. One number in particular is quite out of print, and this makes the set unsaleable in Europe: booksellers being unwilling to purchase incomplete sets. After being completed it should be duly notified by Advertisements in Madras, in London, and in

Calcutta and Bombay: for at present many who would gladly purchase such works are ignorant of its existence.

I am, very faithfully yours,
(Signed) C. P. Brown.

Madras,
19*th January*, 1846.

Resolved,—That a return be laid on the Table at the next meeting of the number of copies of each No. remaining unsold, and likewise that an Estimate be made of the cost of printing the original matter in the Nos. of the Journal now out of print.

Read a letter from Messrs. W. H. Allen and Co., dated 19th December, 1845. Advising the dispatch of books and periodicals per Steamer.

Resolved,—That the following works be ordered out from England for the Society.

Eastern Europe and the Emperor Nicholas. By the author of "Revelations of Russia."
The English Hexapla. By Baxter.
Diary in France. By C. Wordsworth.
Life of Mozart.
Leigh Hunt's Stories from the Italian Poets.

(Signed) T. C. Jerdon,
Secretary M. L. S., &c.

At a Meeting of the Managing Committee of the Madras Literary Society, on Tuesday Evening the 10*th March*, 1846.

Read a letter from Messrs. W. H. Allen and Co., dated 19th January, 1846, advising the dispatch of books and periodicals per Steamer.

Resolved,—That a new Catalogue of the Books in the Society's Library be framed on the same plan as the previous one, and that the Rev. G. Knox be requested to give his valuable aid in preparing it.

Resolved,—That the Committee request Mr. C. P. Brown's permission to part with such of the works presented by him as are duplicates.

Resolved,—That a Manuscript Ship Log of the last century be presented to Captain Biden in the name of the Committee for deposit in the Office of the Marine Board.

A proposition from C. P. Brown, Esq., for the reprint of such of the numbers of the *Madras Journal of Literature and Science* as are out of print is negatived on the score of the great expense required for the republication of so many of the numbers, whilst of many of the others only a very few copies remain.

Resolved,—That a list of such books as require binding be prepared and laid before the next Meeting of the Committee.

Resolved,—That the following works be ordered out from England for the Society.

Fasti Romani. By Clinton.

T. Hood's Poetical Works.

Sir E. L. Bulwer's Translation of Goethe.

Fragmens Arabes et Persanes inedits relatives a l'Indé anterieurement au XI. Siecle de l'Europe. Recurilles par M. Renaud—Paris.

History of the Captivity of Napoleon. By Count Montholon.

(Signed) T. C. Jerdon,
Secretary M. L. S., &c.

At a Meeting of the Managing Committee of the Madras Literary Society, on Tuesday Evening the 7th April, 1846.

Read a letter from Messrs. W. H. Allen and Co., dated 19th February, 1846, advising the dispatch of books and periodicals per Steamer.

Read the following letter from the Honorary Secretary to the Agricultural Society, Calcutta.

Agricultural Society's Rooms,
Metcalfe Hall, Calcutta, 10*th March*, 1846.

Dear Sir,

The Agricultural Society having now taken possession of its apartments in the Metcalfe Hall is desirous of making its Library as complete as circumstances will admit. With that object in view I do myself the pleasure of addressing you in regard to the Madras Journal of Literature and Science, which is, I believe, under your Superintendence. We have the work complete from the fifth volume, but not a single number previous to that volume. If you would therefore enable me to make the work complete, by sending me by the next Steamer all the early numbers comprising Volumes 1 to 4, namely, Nos. 1 to 13, I shall be much obliged; and, if desired, the Society will be glad to pay for the same.

Since writing the above, I find we want one more number, No. 18,

to complete volume 7 (seven). Perhaps you will have the kindness to direct this to be also added to the packet.

I trust our Journals reach you safely, they are despatched regularly as published.

I am, &c. &c.
(Signed) JAMES HUME,
Honorary Secretary.

To the Secretary of the Madras Literary Society.

Ordered,—that as complete a copy as possible be supplied.

Read a communication from the Vice President and Secretary of the Asiatic Society, Calcutta, acknowledging the receipt of bill for Co.'s Rs. 108 for Subscription due for the *Journal of the Asiatic Society* from the years 1840 to 1845, at Rupees 18 per Annum.

Read a letter from James Bird, Esq., Secretary to the Bombay branch of the *Royal Asiatic Society*, forwarding 2 copies of the Society's Journal, No. IX. and requesting payment for the same.

Resolved,—With reference to a list of works presented by the College that as there are duplicates of many of them, the worst of the duplicates be sold, and that a few odd volumes in this collection be also parted with.

Resolved,—That the new Catalogue of the Society's Library now in course of compilation be printed at the *Vepery Mission Press.*

Resolved,—That C. T. Kaye, Esq. be requested to act as Secretary to the Society during the absence of T. C. Jerdon, Esq.

Ordered,—that the *Anti-Slavery Reporter* sent overland without orders be refused from the Post Office.

Resolved,—That the following works be ordered out from England for the Society.

Hobbe's Translation of Thucydides, Oxford Edition.

Relations des Voyages, &c. The Arab Text in 1811, by M. Langles, translated into French by M. Renaud, Paris.

Dictionary of Archaic and Provincial Words, by Halliwell.

The King of Saxony's Journey in England, by Dr. Carus, translated.

Bædæ Historia Ecclesiastica Gentis Anglorum, edited by Hussey, Oxford.

A complete set of Chaucer's Works.

Hollinshed's Chronicles.

Fasti Hellenici, from No. 1 to 54, and all the rest commencing from No. 125.

The articles Crystallography, Mineralogy, and Geology, from the Encyclopœdia Metropolitana.

(Signed) T. C. JERDON,
Secretary M. L. S., &c.

At a Meeting of the Managing Committee of the Madras Literary Society, on Tuesday Evening, the 5th May, 1846.

The Acting Secretary brought to notice that an offer of the following works has been made to the Society through Walter Elliot, Esq.

Lamarck's Natural History of Invertebrated Animals, 10 vols. unbound, (French,) 30 Rupees.

Annals of Natural History and Magazine of Zoology and Botany, 17 vols., of which 16 bound and 1 in numbers, 68 Rupees.

Annales des Sciences, 1837 to 1840, 4 vols., half bound, 12 Rupees.

London Magazine of Natural History, 1837 to 1840, 4 vols., 12 Rupees.

Resolved,—That 1 vol. of each set be circulated to the Members of the Committee for inspection, and that with reference to the Rev. G. Knox's objections, a statement of the funds of the Society be prepared against the next Meeting of the Committee, and that a Statement of the sums expended during the last three years on the various departments of literature be prepared as early as possible.

Resolved,—That the following work be ordered out from England for the Society.

Life and Correspondence of David Hume. By John Hill Burton.

(Signed) C. T. KAYE,
Acting Secretary M. L. S., &c.

At a Meeting of the Managing Committee of the Madras Literary Society, on Friday Evening the 5th June, 1846.

Resolved,—That in future the Committee meet for the despatch of business on the first Tuesday in every month, the usual notice being circulated two or three days previously.

The Acting Secretary read a letter which he had received from the Chairman, J. C. Morris, Esq., regretting that indisposition prevented his attending the Meeting as owing to his approaching departure for England, this would be his last opportunity of doing so.

Resolved,—That as there will be one more Meeting of the Committee before the departure of the next Steamer, viz., on the first Tuesday in July, Mr. Morris be requested to give the Committee the pleasure of his company at dinner on that day.

The Acting Secretary having laid before the Committee a statement of the available funds of the Society prepared agreeably to the Resolution passed at the last Meeting.

Resolved,—That the "Annals of Natural History," according to the tender brought forward at the last Meeting, be purchased for the Society if the set is complete, and that steps be taken for obtaining regularly the future numbers of the work.

Resolved,—That the following books be ordered out from England for the Society.

Algeria and Tunis in 1845. By Captain J. Clark Kennedy.
Life of Canning, by Robert Bell.
Chavalier Bunsen's Egypt, English translation.
Les Léttres Provinciales. By Pascal, published by Didot.
Poems by Wotton and Raleigh. Edited by Hannah, published by Pickering.
Grote's History of Greece.
Chateau D'If. By Dumas. } Parlour Novelist.
The Commander of Malta. By Eugene Sue. }
Fall of the Jesuits, (Murray's Home and Colonial Library.)
Priests, Women and Families. By Michelet.
Essays on the Literature, Popular Superstitions and History of England in the middle ages. By Thomas Wright.
Baron Hugel's Travels in the Punjaub.

(Signed) C. T. Kaye,
Ag. Secretary M. L. S., &c.

At a Meeting of the Managing Committee of the Madras Literary Society, on Tuesday Evening the 7th July, 1846.

Resolved,—That the following works be ordered from England for the Society.

The Ballad Poetry of Ireland.
Life of Luther, by Michelet.
Outram's Conquest of Scinde.
Memoirs of Bishop Corrie.
Letters and Journals of Sir Hudson Low.
Elliot's Horæ Apocalypticæ.
Homes and Haunts of the English Poets.

Mr. J. C. Morris, owing to his approaching departure for England, acquainted the Meeting that he must resign his situation of Chairman of the Committee.

Resolved,—That Mr. Morris be requested to accept the cordial thanks of the Committee on behalf of the Society for the assistance and support which they have received from him formerly as Secretary to the Committee and latterly as their Chairman.

(Signed) T. Pycroft,
Acting Secretary.

At a Meeting of the Managing Committee of the Madras Literary Society, on Tuesday Evening the 1*st September*, 1846.

Read the following Extract from the Minutes of Consultation of Government, dated 4th August, 1846, forwarding Extract from a Letter from the Honorable the Court of Directors, dated 20th May, No. 12, of 1846, and copies of the papers therein referred to.

PUBLIC DEPARTMENT.

Extract from a Letter from the Honorable the Court of Directors, dated 20*th May*, *No.* 12, *of* 1846. *Answer to Letter dated* 13*th August*, *No.* 14, 1844.

Extract from the Minutes of Consultation, dated 4th August, 1846.

Ordered that copies of these paras and the papers noted in the margin be forwarded to the Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society with reference to their Secretary's communication of the 10th Nov. 1843, and also to the Revenue Board in the Department of Public Works, the Military Board and the President and Governors of the Madras University (with copy of the letter from the Secretary to the Literary Society dated 10th November, 1843,) who will be pleased in concert with one another to adopt such measures as they may deem expedient for the formation of a central Museum at the Presidency.

Under the authority here conveyed the Government will be prepared to sanction such moderate charges as may be necessary to carry out this object.

2 to 5 Proposed formation of a Museum of Economic Geology at the Presidency and of local Museums of the same kind in the interior.

From Maj. Gen. W. Cullen, dated 5th Dec. 1843, with enclosure.

10. The formation of a Museum of Economic Geology at the Presidency to be a permanent charge on Government was urged by the Literary Society aud Auxiliary of the Asiatic Society.

11. Major General Cullen proposes that there should be formed "a small Museum for each "Collectorate, and for which a room might probably be set apart in each Cutcherry or Court "House, the Museum to be under the charge of "the Collector (assisted by the Engineer and Medical "Officer,) and who could also probably afford a "servant to look after it."

Mr. Chamier has recorded a Minute recommending this plan as greatly preferable to that of a general Museum at the Presidency.

12. We are not however satisfied that the expense involved would be as small as Major General Cullen supposes, and that persons qualified by knowledge and tastes for rendering them useful, would be found in every locality. The mere formation of local

Museums imperfectly arranged and insufficiently superintended would not be calculated to have any extended utility. The benefit of such Institutions depends mainly on the interest felt in the subject by those entrusted with their management, and if left to the care of Officers burthened with other duties, and not specially interested in such pursuits, they would not be likely to receive the degree of attention which could render their establishment a public advantage.

13. We think that in the first instance the formation of a central Museum at Madras (which might be advantageously connected with the University) combining many subjects of interest, and creating by degrees a general taste and appreciation of Science, should be the primary object, and that such local Museums as it may be expedient to authorize, in places where Officers are to be found with the requisite tastes and qualifications, should be considered chiefly as Repositories for the collection and transmission to the central Museum, of the interesting objects afforded by their respective localities. In such cases we willingly authorize such small charges as may be necessary, or as may contribute materially to the efficiency of the arrangements.

Resolved,—That these Papers be communicated to the Committee of the Literary Society, who will be furnished with a list of all the Scientific Reports on the records of Government with a view to the selection for publication of such as would answer any useful purpose, the Government undertaking to defray any moderate expense on this account.

14. You further transmit a List of all the Scientific Reports which are on the records of Government, and suggest that it would be desirable to place these and similar documents in the hands of persons competent to test their value, and that authority should be granted for printing either the whole or selected Papers, it being "clearly of importance if scientific inquiries "are to be encouraged by the Government, "that individuals should have access to the in-"formation these papers contain."

15. We cannot think that the printing of more than a limited selection of the Papers contained in the list could answer any useful purpose, considering the subjects of some and the old date of a considerable number. But we shall not object to any moderate expense which it may appear to you advisable to incur for giving publicity to any valuable information on the records of your Government.

(True Extracts.)

(Signed) R. G. Clarke,

To *Deputy Secretary to Government.*

The Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society.

Ordered,—that the foregoing Extract with its Enclosures and Extracts from the Proceedings of the Society on the subjects to which it relates be circulated to the Members of the Committee with a view to the questions discussed by the Honorable Court being taken into consideration at the next Monthly Meeting.

Read two letters from Messrs. Wm. H. Allen and Co., dated 26th June and 18th July, 1846, advising the despatch of books and periodicals per Steamer and per Ship "*Bucephalus*."

Proposed by J. U. Ellis, Esq.

That the Rev. G. Knox and Captain Losh be requested to form a Sub-Committee for the purpose of revising the Rules of the Society.

Seconded by W. McTaggart, Esq., and carried unanimously.

Resolved,—That the following works be ordered out from England for the Society.

Collected Writings of W. S. Landor.
The Church and the Catacombs. By the Rev. —. Maitland.
Wit and Humour. By Leigh Hunt.
Select Poetry of the Reign of Elizabeth, edited by the Parker Society.
Chapters on Church-yards. By Mrs. Southey.

(Signed) T. Pycroft,
For the Secretary M. L. S., &c.

At a Meeting of the Managing Committee of the Madras Literary Society, on Tuesday Evening the 6th October, 1846.

1*st*. *Resolved unanimously*,—That Walter Elliot, Esq. be nominated Chairman of the Committee, in succession to J. C. Morris, Esq., who has proceeded to England.

T. Pycroft, Esq. requests that he may be relieved from the duties of Secretary, which he undertook during the illness of the late Acting Secretary C. T. Kaye, Esq., and has continued to perform since the decease of that Gentleman.

2*d*. *Resolved*,—That Captain Losh be requested to officiate as Secretary until the return to the Presidency of the Secretary, T. C. Jerdon, Esq., or until some other arrangement can be made.

In conformity with the Resolution passed at the Meeting on the 5th May last, T. Pycroft, Esq., for the Secretary lays before the

Meeting a statement of the sums expended during the last three years 1843-44-45 on the various departments of Literature.

Statement exhibiting the sums of money expended during the last three years 1843, 1844, *and* 1845, *on the various departments of Literature.*

	£	s.	d.
Divinity, - - - - - - - -	33	19	6
Classical Literature, - - - - - -	11	2	0
Philosophy, Arts and Sciences, - - -	44	7	0
Natural History, - - - - - - -	18	6	6
History and Antiquities, - - - - - -	98	9	6
Politics, Statistics and Law, - - - -	29	12	6
Biography, - - - - - - - -	67	13	6
Geography, Topography, Voyages and Travels,	89	16	6
Belles Lettres, - - - - - - -	30	15	6
Poetry and Drama, - - - - - -	7	18	0
Novels and Tales, - - - - - - -	204	14	0
Periodical Literature, - - - - - -	184	15	6
Dictionaries and Grammars, - - - - -	5	1	0
Total £..	826	11	0

3*d*. *Resolved*,—That this Statement be entered for reference in the Record of the Proceedings of this Meeting.

Read Memorandum from the Librarian stating that in the present year only eleven new Subscribers have been admitted Members of the Society, of whom five have joined the first class and six the second class; while in the same period, the Society has lost by casualties or return to Europe, eight Subscribers of the first, and four of the second class; also that the following books have been lost.

	Invoice Price. £	s.	d.
Chatsworth, 3 vols., - - -	1	11	6
The English Fire Side, 3 vols.,	1	11	6
The Jewess, - - - -	0	4	6

and that certain Subscriptions for the 3d quarter of 1846, due by deceased Subscribers have not yet been paid.

4*th*. *Resolved*,—That with reference to Rule 3d, Messrs. Rose, Harding and Maclean be called upon either to pay the invoice prices of the books lost by them respectively, or to furnish the Society with new books to replace them; and that the executors of Messrs. Rowlandson and Macleod be applied to for payment of the Subscriptions due by those Gentlemen. The receipted bill for the Subscription due by Mr. Kaye is to be sent to T. Pycroft, Esq., in compliance with his request.

Read Memorandum showing the expense incurred and sums received, by the Society on account of the 31 Numbers already published of the *Journal of Literature and Science.*

	Rups.	A.	P.
Total expense of Printing, &c. the first 29 Nos. of the *Madras Journal of Literature and Science*, - - - - -	14,161	12	11
Total amount realized by the sale of the above 29 Nos. -	10,955	13	4
Total loss to the Society,	3,205	15	7
Total expense of Printing the last two Nos. 30 and 31, - -	615	12	0
Total amount realized by the sale of the above two Nos. -	224	0	0
Total loss to the Society,	391	12	0
Bills in course of collection from the Presidency Subscribers to No. 31 of the Journal, - - - - - - -	82	0	0

5th. Resolved,—That this Memorandum be entered for future reference on the record of the proceedings of this day's Meeting, and that as the publication of the Journal has hitherto involved a considerable pecuniary loss to the Society, no more numbers be published for the present.

Read Memorandum showing the expenses incurred by the Society during the past year (1845) on account of Overland charges for books and periodicals received from England.

Memorandum showing the Overland Expenses on the monthly parcels of Periodicals and Books transmitted to the Society from England.

			£	s.	d.
Invoice of Periodicals	and Books, dated	16th Jan. 1845,	4	1	0
Do.	do.	19th Feb. do.	2	8	0
Do.	do.	17th Mar. do.	1	13	0
Do.	do.	16th April do.	3	8	6
Do.	do.	17th May do.	4	10	0
Do.	do.	17th June do.	2	6	0
Do.	do.	16th July do.	3	18	0
Do.	do.	16th Aug. do.	3	5	6
Do.	do.	16th Sept. do.	3	1	0
Do.	do.	19th do. do.	0	7	0
Do.	do.	17th Oct. do.	3	2	6
Do.	do.	17th Nov. do.	2	8	0
Do.	do.	17th Dec. do.	3	9	6
		Total £..	37	18	0

6th. Resolved,—That Messrs. Allen and Co. be requested in future not to send any books by the Steamers, unless expressly directed to do so, and to transmit *only* the undermentioned periodicals by the

Overland route, all the other periodicals and books being forwarded by ships.

Ainsworth's Magazine,
Athenæum,
Bentley's Miscellany,
Blackwood's Magazine,
Dublin University Magazine,
Fraser's Magazine,
Hood's Magazine,
Jerrold's Shilling Magazine,
Literary Gazette,
New Monthly Magazine,
United Service Magazine,
Punch,
Edinburgh Review,
Quarterly Review,
Westminster Review,
North British Review.

7th. Resolved,—That on the recommendation of J. U. Ellis, Esq., W. A. Morehead, Esq. be elected a Member of the Society of the first class.

The Rev. G. Knox lays before the Meeting certain amended Rules prepared by the Sub-Committee appointed at the Meeting of the 1st Ultimo, and recommends that they be approved and submitted for confirmation at the next General Meeting.

Proposed emendations in the Rules of the Madras Literary Society.

IX. That the Secretary be appointed by the General Committee of Management, subject to the approval of the President of the Society.

X. That all vacancies permanent or temporary in the Committee of management occurring in the course of the current year be filled up by the Committee.

VIII. Add to this Rule.

Further they shall be empowered to fill up any vacancies occurring in their body during the current year.

8th. Resolved,—That these revised Rules be accordingly approved and submitted for confirmation at a General Meeting to be specially convened at an early date.

Read list of unpaid bills of old standing.

List of Bills.

	Bills.	Rs.	A.	P.
C. J. Brown, Esq., dead, - - - -	5	110	0	0
Rev. Mr. Webster, dead, - - -	1	22	0	0
Captain A. Macworth, - - - -	4	101	0	0
Captain C. A. Kerr, dead, - - -	4	88	0	0
Captain (now Major) Poole, now at Madras,	8	181	10	8
R. T. Porter, Esq., now in the Mofussil, -	5	110	0	0
Captain Otter, returned to England, - -	3	66	0	0
Captain Wm. Walker, dead, - - -	1	35	0	0
W. R. Smyth, Esq. - - - - - -	2	29	5	4
Total,	33	743	0	0

9th. Resolved,—That such of the Gentlemen named in this list as are now alive and in India be immediately called upon to pay the sums due by them respectively.

10th. Resolved,—That the following works be ordered from England for the Society.

Haydon's Lectures on Painting.

Sale's Brigade in Affghanistan.

Narrative of the Campaign of New Orleans. By Gleig.

Confessions of Silvio Pellico.

Publications de la Societé Belgie Liqurairtee.

Ouvres Completes D'Alexandre Dumas, 6 vols. in 8vo. a 2 colonnes.

Ouvres Completes de F. D. La Mennais, 2 vols. in 8vo. a 2 colonnes.

Ouvres Completes de La Martine un volume in 8vo. a 2 colonnes.

Concluding volume or volumes of Le Juif Errant by Eugene Sue; 8 volumes, containing chapters XVII. of the Bruxelles Edition, having been received in December last.

11th. Resolved,—That Messrs. Allen and Co. be requested to discontinue sending the Illustrated Magazine and Drummond's Histories of Noble British Families, and that the numbers of the latter already received be sold on account of the Society at the first favorable opportunity.

12th. Resolved,—That the papers received from Government respecting the proposed foundation of a Museum of Economic Geology be again circulated to the Members of the Committee; that each Member be allowed to retain them for three days for perusal and such remarks as he may consider requisite, and that the subject be again considered at the next monthly Meeting of the Managing Committee preparatory to its being brought up for disposal at the General Meeting of the Subscribers about to be convened.

(Signed) WALTER ELLIOT, *Chairman.* (Signed) J. J. LOSH, *Actg. Secy. M. L. S., &c.*

At a Special General Meeting of the Madras Literary Society on Wednesday the 11th November, 1846.

The Honorable Sir E. Gambier, President, in the Chair.

The Meeting proceeded to take into consideration a proposition of the Managing Committee that the Society's Museum shall be offered to Government, upon certain conditions; for the purpose of becoming the foundation or nucleus of the central Museum about to be established at Madras, under instructions from the Honorable the Court of Directors.

The Meeting having approved of the proposition of the Managing Committee, a draft of letter which the latter intend to address to Government on the subject was read, and with certain modifications of the 5th paragraph approved of, and passed by the Meeting.

To

The Chief Secretary to Government, Fort St. George.

SIR,

Extract from a letter from the Honorable the Court of Directors, dated 20th May, (No. 12 of) 1846.
Copy of letter to Government from Major General Cullen, (with annexments,) dated 5th December, 1843.
List of the Scientific Reports on the records of Government.

1. I have the honor by desire of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, to acknowledge the receipt of Extract from Minutes of Consultation in the Public Department, dated 4th August, 1846, No. 726, with the documents therein recorded (as per margin ;) and, with reference to the subject thereof to state for the information of the Most Noble the Governor in Council, that the Committee being of opinion that the Society's Museum could not be disposed of in a manner more likely to be practically useful, as well to Government as to the Public, than by being made part of the Central Museum at Madras, the establishment of which the Honorable the Court of Directors have been pleased to sanction, determined to propose to the Subscribers that the collection should be offered, on certain conditions, to Government, with a view to its becoming the foundation or nucleus of the proposed Central Museum.

2d. This was accordingly done at a Special General Meeting held at the College on Wednesday the 11th instant, and the Committee have now the honor, with the sanction of the Subscribers, to offer their Museum to Government, upon the understanding, that if the plan for establishing a Central Museum at Madras, should fail, or if after being established it should be closed, or the collection dispersed, the specimens presented by the Literary Society shall be again placed at its disposal, and that all Members of the Society shall have the freest possible access to the central Museum : which privilege the Committee hope Government will be pleased to extend to the Members of the Polytechnic Institution, which although not at present directly connected with the Literary Society appears an association for similar purposes.

3d. The Society's Museum though far from being a very extensive collection, contains, as observed by Major General Cullen, in the 3d paragraph of his letter to Government, specimens of the rocks and

minerals of almost every part of the Madras Presidency, from Cape Comorin to the Nerbuddah, and moreover, many specimens from the British Isles and other countries both in Europe and Asia. These have been classed by Major General Cullen, Mr. Heath, Captain Newbold, Mr. Jerdon, and the late Doctors Malcolmson and Benza and Mr. C. T. Kaye, and a catalogue of them has been nearly completed, though not yet printed. In addition to the mineral specimens, there are also in the Museum various curiosities which are described in a list annexed to the catalogue of the Library; some of which were purchased by the Society, but the greater part presented to it.

4th. The Museum is at present deposited in one of the upper rooms in the College, and as no separate establishment is maintained on account of it, its custody involves no expense to the Society. Either on account of its present location, or because its existence is not generally known, it is very rarely visited, and, as remarked by Major General Cullen, no part of it has yet been turned to any useful practical purpose.

5th. Unless it is considered absolutely necessary to attach the Central Museum to some Government Department or Institution, the Committee are of opinion that it might be most advantageously connected (at least as a temporary and experimental measure) with the Polytechnic Institution, with which it is not impossible that the Literary Society may eventually be, to a certain extent, amalgamated. To the connection of the Museum with the Madras University, as suggested by the Honorable the Court of Directors, the Committee think there are numerous objections, in addition to the obvious ones arising from the present disadvantageous situation, as regards publicity and facility of access, of the premises now occupied by the University, the want of room on them for the accommodation of a Museum, and the absence of any paid functionary or establishment who could undertake the Curatorship of it. The Committee take it for granted that Government will deem it indispensably necessary to direct the location of the proposed Central Museum in some place where it may be most available and easy of access to the Public, and to appoint a duly qualified Curator with an adequate establishment for its custody and preservation; so that it does not appear that any saving of expense would be occasioned by its being attached to any existing Government Institution or Department. Whatever may be the decision of Government on this point, the Committee would solicit the particular attention of the Most Noble the Governor in Council to

the remarks contained in the last paragraph of their late Secretary's letter, dated 10th November, 1843, respecting the qualifications and attainments which the Curator of the Museum should possess and the advantages which would arise from a laboratory being provided as part of the establishment of the Museum.

6th. The Committee beg to express their hope that Government will not consider it necessary to make the proposed Central Museum solely one of Economic Geology. They are decidedly of opinion that it might, very easily and advantageously, and without much additional expense, be made to comprise objects of almost every description usually found in large public Museums in Europe; and they conceive that even supposing it to derive its supplies almost exclusively from the territories under the Madras Presidency and the adjacent seas, a very curious and valuable collection might be formed at no very remote period, and without much cost to the State, exclusive of the charges on account of the Establishment at Madras.

7th. The Committee propose to forward a copy of this letter to each of the Boards and Departments with which they were placed in communication by the orders of Government in the Extract from Minutes of Consultation under acknowledgment.

8th. The request of Government contained in the Extract from Minutes of Consultation under acknowledgment regarding the various scientific reports (of which a list accompanied it) will shortly be complied with by the Managing Committee, who propose to apply for such of the Reports in question as seem from the subjects of them, likely to be generally useful or interesting, and after perusal of them to make a selection for publication, if deemed expedient by Government.

9th. The Committee further propose shortly to submit to Government a plan for making the Native Library now deposited in the College, which comprises the portion of the Mackenzie manuscripts sent out from England, and the books and manuscripts recently presented to the Society by Mr. C. P. Brown more available to the public, and thereby more useful than it has hitherto been.

I have the honor to be, &c. &c.

The Meeting proceeded to consider certain new Rules and additions to existing Rules framed by the Managing Committee and recommended by them for the confirmation of the Subscribers.

VIII. Add to this Rule.

Further, they shall be empowered to fill up any vacancies occurring in their body during the current year.

IX. That the Secretary be appointed by the General Committee of Management subject to the approval of the President of the Society.

X. That all vacancies permanent or temporary, in the Committee of Management occurring in the course of the current year be filled up by the Committee.

The Meeting approved of, and confirmed the above rules, which are accordingly to be included in the Rules in the new catalogue now in the Press.

The Meeting proceeded to elect a Member of the Managing Committee in the room of J. C. Morris, Esq. who has proceeded to England.

Major Anstruther C. B. proposed by Walter Elliot, Esq. seconded by R. H. Williamson, Esq. is elected accordingly.

The thanks of the Meeting were unanimously voted to the Honorable the President for his conduct in the Chair.

(Signed) J. J. Losh, *Offg. Secretary.* (Signed) Edward Gambier, *President.*

At a Meeting of the Managing Committee of the Madras Literary Society on Tuesday the 8th December, 1846, *at* 7 *o'Clock P. M.*

Read the following Memorandum from Captain S. Best on the subject of Rain Guages.

" The Court having particularized Rain Guages, perhaps the Literary Society may be inclined to recommend and Government to adopt the proposition made in my paper on that subject,* involving an expense of not more than 1,500 Rupees altogether.

It is very true that there may be some trifling errors in the measurement and in the registry of such rain guages as I propose ; but for most practical purposes observations of the annual fall within two inches or of the monthly fall within two tenths would be quite sufficiently accurate, and on this degree of correctness we might reckon.

Much useful information is lost in consequence of too great a degree of accuracy being deemed indispensable. The rain guage measuring tenths of inches will be as useful to the farmer as the

* See Journal No. 30, Vol. xiii. pt. i. p. 178.

pluviometer measuring hundredths and thousandths of inches is interesting to the philosopher.

In the course of my wanderings I should be able to set up some rain guages myself and to instruct some Natives in the manner of registering them. I have occasionally explained to Natives the European method of measuring rain, and found them ready to acknowledge both its superior correctness and the great advantage which such observations will conduce to."

(Signed) S. Best."

Adiyar, 2*d September*, 1846."

1*st. Resolved*,—The Committee observe that, although a considerable part of the communication to Government from Major General Cullen adverted to in the recent orders of Government and of the Honorable the Court of Directors relates to Rain Guages, yet as the subject is not mentioned in the Paras. of the Court's letter forwarded for their information or in the orders of Government thereon in Minutes of Consultation in the Public Department dated 4th August, 1846, No. 726, they do not consider themselves at liberty at present to comply with the request of Captain Best, should a favorable opportunity however, occur, they will not fail to give it due attention.

Read the Memorandum laid by Captain W. K. Worster, before the last General Meeting, which was unable to take it into consideration because it had not been previously submitted to the Managing Committee.

" Why not give the Museum, and Scientific, perhaps the whole Library to the Polytechnic Institution. The surplus funds of the Ice Subscribers might then perhaps be given for a building. Government in accordance with the Court's letter giving a Curator for the Museum, the Polytechnic making up a sum sufficient to insure a man of some character to come out. Government would have the advantages of his services on all Scientific subjects they can refer to the best man ! they can get.

(Signed) W. K. Worster."

2*d. Resolved*,—The Committee although disposed heartily to join with and assist the Polytechnic Institution to the extent of their power as far as may be consistent with the constitution and objects of the Literary Society, are not at present prepared to recommend Captain Worster's suggestion for the adoption of the Subscribers.

They will however be happy to take into consideration any proposal which the Polytechnic Institution may think fit to make, with a view to a more intimate connection between the two bodies.

Read Memorandum from the Librarian respecting the conduct of Peon Nagojee Row, and his claim to be paid as a Peon, with reference to the 8th Resolution at the last Monthly Meeting.

(Here enter.)

3*d*. *Resolved*,—That in conformity with the Resolution above quoted, the pay of Peon Nagojee Row be increased from Rupees 3 8 0 to 7 per mensem, from the 1st January, 1847.

MEMORANDUM.

Nos. 2, 3, 4, 12 and 13 of the Madras Journal of Literature and Science required by the Royal Society of Bavaria are not in the Library, and it does not appear that they are procurable in Madras.

Read Memorandum of the Librarian stating, with reference to the 1st Resolution at the last Monthly Meeting, that the numbers of the Madras Journal of Literature and Science required by the Royal Academy of Bavaria cannot be furnished from the Library, and that hitherto it has been found impossible to procure them elsewhere in Madras.

4*th*. *Resolved*,—That the Librarian be instructed to purchase the required numbers of the Journal from Book Hawkers or at any public sale of books, whenever an opportunity of doing so occurs.

MEMO.

Wanted Volume 28 of the Edinburgh Review to complete our set.
Do. Vols. 16 and 20 of the Quarterly Review.
Do. Blackwood's Magazine, Vols. 1, 2, 3, 4, 7, 8, 9, 10, 13 and 14.
Do. New Monthly Magazine, Vols. 1, 2, 3, 22, 23 and 24.

Read Memorandum showing the volumes of standard periodicals required to complete the bound sets of each in the Society's Library.

5*th*. *Resolved*,—That the Librarian be instructed to prepare a Memorandum showing the particular numbers of each of the periodicals included in the missing volumes, in order that steps may be taken to replace them.

Read Memorandum showing the periodicals of each of which one copy is bound and kept in the Library for the use of Subscribers.

Memorandum.

One copy of each of the following periodical publications is bound and kept for the use of the Subscribers to the Society.

Edinburgh Review,	Dublin University Magazine,
Quarterly Review,	Examiner, the

Westminster Review,
North British Review,
Calcutta Review,
Ainsworth's Magazine,
Athenæum,
Bentley's Miscellany,
Blackwood's Magazine,
Christian Observer,
Fraser's Magazine,
Hood's Magazine,
Jerrold's Shilling Magazine,
Literary Gazette,
New Monthly Magazine,
Punch,
United Service Magazine.

6*th*. *Resolved*,—That it does not appear to the Committee necessary to make any alteration in the existing arrangement respecting these periodicals.

Read Memorandum showing the expense incurred in publishing Nos. 30 and 31 of the Journal, the amount realized by the sale thereof, and the amount of Subscriptions thereto remaining uncollected.

Memorandum.

Paid for Printing the Journal, No. 30, - -	327	4	0			
Do. do. do. No. 31, - -	288	8	0			
				615	12	0
Amount realized by the sale of the above in 1844,	164	0	0			
Do. do. do. 1845,	26	0	0			
Do. do. do. 1846,	130	0	0			
				320	0	0
				295	12	0
Amount of Subscriptions remaining uncollected, - - -				272	0	0
Balance against the Journal, Rups.				23	12	0

7*th*. *Resolved*,—That steps be taken to obtain payment of the sum remaining uncollected, and a Memorandum showing the amount realized in the past month and the balance still due, laid before each Monthly Meeting of the Committee.

The Committee will consider hereafter whether it is expedient to resume the publication of the Journal.

The Officiating Secretary lays before the Meeting the report of the Sub-Committee appointed to report on the collection of Native Books and manuscripts belonging to, and in the charge of, the Society.

8*th*. *Resolved*,—That this Report be circulated without delay, and should no objection be offered, or remarks requiring further consideration made that it be adopted by the Committee, and a copy of it forwarded to Government.

9*th.* *Resolved*,—That the following Works be ordered out from England for the Society.

A Collection of the Ballads of Mary Howit.
Minstrelsy of the English border. By Frederick Sheldon.
Burke's History of the landed Gentry.
Short Sketches of the Wild Sports and Natural History of the Highlands from the Journals of C. St. John, Esq.
Works of Daniel De Foe, latest complete edition.
Shirley's Dramatic Works, with notes by the late W. Gifford.
Valerius.
Cowper's Works, } Aldine Edition.
Thomson's Works, }
Southey's Life of Cowper.

(Signed) WALTER ELLIOT,
Chairman.

(Signed) J. J. LOSH,
Offg. Secy. M. L. S., &c.

BRITISH MUSEUM NATURAL HISTORY

C. K. S. PRESS, MADRAS.